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TIMES PAST — THE TIMES

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The SDP's cool reason

The first thoughts of the Social Democratic Party on higher education are entirely reasonable – too reasonable perhaps for a new political party which must engage emotion as well as reason if it is ever to win a share of real power. Among the SDP education and training policy group's proposals for immediate action are a restoration of student grants to an adequate level, an end to the restriction on the number of home students that higher education can admit (universities, really – no effective way has yet been found to "cap" the number of students in polytechnics and colleges), a review of university admission procedures especially at Oxford and Cambridge, emergency arrangements to accommodate the present bulge of 18-year-olds, more courses for adults (with fees being tax deductible), and a review of overseas students' fees. Who could object to any of these proposals – except perhaps the spirit of our age as expressed in the policies of the present Conservative Government?

Yet for all its reasonableness the SDP's proposed policy can be criticized from two perspectives. First, it hardly amounts to mould-breaking; instead it clings closely to the conventional wisdom. Its spirit can perhaps be best described as neo-Robbinsism; a commitment to wider access to higher education based on *liberal beliefs (which Mrs Thatcher* and her constituency would deny), a renewed faith in the value of general degrees and corresponding hesitation about too utilitarian a version of vocationalism (it is a long time since liberal arts colleges have been mentioned in such approving terms), and a moderate scepticism about, although not categorical rejection of, *the binary policy (one has a feeling* that the authors of this draft were more familiar with universities than with polytechnics and colleges).

Yet this conventionality can be *illuminating. It is possible to argue* that reform takes place on the margins of consensus rather than by a traumatic process of "mould-breaking". Seen in this light the SDP policy may be a *more accurate guide* to what Lord Butler called "the art of the possible" than a radical blueprint of a brave new world. If such an argument is accepted then it *follows that the reforms proposed in* the SDP's draft policy must have already been incorporated to some extent in higher education's conventional wisdom. If this is true, the *reform of the University Grants* Committee, the explicit separation of funding for research and for teaching, and some fudging of the binary policy must be high on the *agenda of change.*

A second criticism of the SDP's *proposed policy is that it is apparent*ly ignorant of the political realities of higher education. At the microscopic level it leads the policy group into the error of supposing that the *National Advisory Body* can be "executive rather than representative" and that its membership can be made to reflect that fact. The difficulty is that this is a non-fact, because every*one in the non-university sector*, bar a few mavericks, is representative of some interest, and because all the pressures in the universities are to move in precisely this representative *direction in any UGC reform.*

At the macroscopic level the SDP is led into the trap of believing that the virtue of greater access to and more popular forms of higher education, *and the value of increased in*vestment in both teaching and research excellence in universities and polytechnics are self-evident. The sad truth is that however secure such *beliefs may have appeared in the* period 1945 to 1979 today they are under siege. They cannot be taken for granted any longer. The SDP offers reasonable policies based on *liberal beliefs in a world unreason*ably suspicious of such cultivated liberalism. The Labour Party for all its faults has a stronger sense that fire must be fought with fire and that *cool reason is no longer a safe path* to a more democratic society.

One step back, two steps forward

The alternative to formal validation, *which was discussed by last week's* meeting of the Council for National Academic Awards, is a subject that touches not only the immediate interests of polytechnics and colleges *which offer CNAA degrees but also* [illegible] not only affect the interests of the universities but also are arguably as important for the future pattern of higher education as the more immediate and high-profile issues of resources which are being tackled by the new National Advisory Body.

At a practical level the immediate question for the CNAA is whether, after proper consultation, to go beyond its earlier "Partnership in *Validation*" proposals and to propose that the more mature polytechnics and colleges should be able to award their own degrees after due accreditation by the council. This, of course would require a change in the CNAA's charter. The answer to this question is almost certainly yes. The earlier proposals were widely regarded as half-hearted and would *have in any case represented* a messy half-way house tutelage and independence. There seems little room for doubt that at least half the polytechnics have as good a case for *being given the freedom to award* their own degrees as the new universities had *in the 1960s.*

However, it would be wrong to assume that as the polytechnics and colleges are allowed greater academic discretion the CNAA itself [illegible] standard. Instead the council should be encouraged to expand its role and to take a greater responsibility for the monitoring of academic standards across the whole non-university sector, and possibly even to provide helpful advice and assistance to the universities.

In such a role the CNAA would need to show more flexibility in its relationship with institutions, ranging from the loosest form of accreditation in the case of the mature polytechnics, through half-and-half schemes of partnership, to formal validation in all its traditional rigour in the case of institutions on or beyond the *fringe of higher* education. Within such a spectrum the council could develop a more active *relationship* with some universities.

There are two reasons why a broadly defined *accrediting* and validating agency is needed in British higher education. First, as the system becomes increasingly diverse, as much through entrepreneurial diversions as through *outright* expansion, it will no longer be possible to continue to believe in the myth of the "gold standard" according to which the standards of all degrees are regarded as broadly comparable. Nor will it be respectable to rely on informal networks of influence to con[illegible] more objective will be required.

Secondly, decisions about the distribution of *resources will have to be* informed more and more by assessments of relative quality. Both the *UGC* and the NAB will need to know, in an open and contestable sense, which institutions, *departments* and courses within their respective sectors should receive *favourable* treatment in the grounds of their sheer quality. In the case of the non-university sector this issue will be an immediate one, as the NAB moves towards a system of *programme* and even institutional reviews in the place of the present course-by-course approvals.

It is clearly important that the NAB and the CNAA should march *in step. It is also* important that British higher education should provide itself with the *institutional in*telligence to make sensible and defensible decisions about academic quality. For both reasons the CNAA is likely to have an even more influential role in the future *than in* the past, although it may need to be more liberally applied.

Searching for a scapegoat

The resignation in swift succession of two heads of institutions from opposite sides of the binary line offers a stark illustration of the changed nature of top management positions in *higher education*. Gone are the days when a directorship or vice chancellorship could be *thought to involve* only relatively painless decisions taken in the civilized arenas of *academic life.*

Even at the height of the student disturbances of the late 1960s, the enforced resignation any of the leading figures was never a serious possibility. But the new subtler pressures of the 1980s will take a heavier toll. It will be surprising if there are not further casualties.

There is nothing to be gained from dwelling on either Dr Adamson's or Professor Haszeldine's cases, which both reached the same outcome after lengthy and often unedifying public wrangling. But their special circumstances should not disguise the general *lessons for all those* responsible for universities, polytechnics or colleges. If they are to retain a strong grip on their institutions, and on their jobs, they will need maximum efficiency *from their administration* and a preparedness to be decisive and even ruthless over forward planning.

In the new financial climate, heads of institutions find themselves caught *in the crossfire between* academics demanding a defence against the cuts and the paymasters with their demands for dramatic savings. They can soon become the focus for dis*satisfaction* on both sides in the search for a convenient scapegoat, especially when senates and councils are not prepared to take uncomfortable decisions collectively.

The danger is that candidates of the highest calibre may become increasingly difficult to attract into leadership positions which are seen to have little to offer in compensation for the isolation and pressures of office. Rotating appointments with fixed terms of office, which are common in the United States and already *operate* at Oxbridge and London, may be one option for reducing stress on individuals. But *while* existing conditions prevail, directors and vice chancellors must be given the greatest possible assistance by their officials and senior colleagues. To expect them to resolve the conflicting demands of financial wizard and academic sage alone is asking too much.

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Laurie Taylor

Darling!
Yes, mummy.

Darling. Haven't I told you before *not* to throw those expensive wooden toys against the new paintwork.
But I'm playing nuclear splosions.

With farmyard animals?
I'm pretending that they're *Argies and we've dropped a neutron bomb on them and they're splattering all over the place.*

Darling. I really can't think where you get such appalling notions. How many times must I tell you. *Argentinians*, not "Argies". And now be a good girl and take these things out to your father.
Where is he?

Sitting at his table at the bottom of the garden.
What things?

This pile here. Two dictionaries and a *Roget's Thesaurus*. .
And an encyclopedium

Encyclopedi*a*. Plural. And *don't* start asking why. Then, typewriting paper. Pens and pencils. And *this* block of wood.
What's that for, *mummy?*

It goes underneath the paper, so that there's a nice firm writing surface.
And this big black book?

That's right, darling. That's a *thesis*. A doctoral thesis. For *marking*.
And these pieces of paper with *squiggy writing on them?*

Yes, that bundle of undergraduate essays. And don't forget daddy's diary and pocket calculator.
And the tape recorder?

Nearly right. *Cassette* recorder. ***Cassette* recorder.**

That's it. Then just the large stapler, box of paper *clips*, half-a-dozen rubber bands. And Bob's your uncle.
Mummy?

Don't chatter, darling. Daddy's waiting for them.
But mummy?

What is it, darling?
Why does daddy have to have all these things on his table *every* time he goes out and sits in the sun?

You know perfectly well, darling. *It's* been the same for years. He simply *can't* get a wink of sleep without them.

The Times Higher Education Supplement

July 23, 1982 No 507 Price 45p

Universities on target for cuts

by Ngaio Crequer

A survey of every university in Great *Britain* reveals they have largely acted on University Grants Committee advice to close departments and re*duce* intake, and are approaching the required staff reductions.

A year after the infamous July letters from the UGC, in which the universities for the first time were *given detailed advice on subject areas*, almost all report that they are on target for the new student numbers. Only Salford, savagely cut, has insisted on its own, higher targets.

But during *The THES survey* there was one consistent and very loud cry from the universities: they must be able to recruit new blood to retain their vitality. Random staff *reductions have badly affected de*partments efficiency and viability.

In broad subject areas the universities have done as they were told, although not all recommendations to *discontinue* departments were accepted. Drama, which has a strong lobby in the universities, has done comparatively well, being maintained at four universities and music has been retained at three.

Russian, recommended for reductions before the July letters, has fared badly, reduced or phased out at seven places, but kept despite UGC advice at Keele.

There is concern about medicine, particularly because of the attack on the National Health Service, with Birmingham, Dundee and Nottingham experiencing problems.

Some universities report that proposed increases in sciences or engineering are impossible within the overall decrease in student numbers. Aston has been unable to increase physical sciences and Southampton physical and biological sciences for the same reason.

Despite the furore at the time over the UGC's selectivity strategy almost *all universities* have been selective themselves in deciding how to make the cuts.

Some have been forced to make the most searching economies. At Salford they have cut back on weedkillers for the car park and reduced the number of times that sports pitches are marked. All universities are looking for more sources of external income, and some are exploring new types of appointments to share salary bills with outside bodies. There has been a rash of mergers at London.

Many universities are satisfied that they are on course with academic staff reductions, all so far achieved voluntarily, but the next phase will be more difficult, with a declining take-up rate under the premature retirement compnsations scheme.

But vice chancellors are worried about the age distribution of staff, the inability to nurture new developments and to recruit new young staff, and the effect on departments of staff leaving at random.

According to Mr Graham Hills, principal of Strathclyde: "The central aim must now be the revitalization of the university system by encouraging the appointment of new, young academics." He is particularly concerned about the newer disciplines.

Mr D.A. Schofied, secretary and registrar at Southampton says that nothing has happened since last year to change their general view that the harshness of the cuts and the speed of their implementation would do lasting damage to the university and to teaching and research.

Professor John Butterworth, of Warwick says the university is maintaining its momentum but "there are many new developments which cannot be embarked upon because the funds simply are not available."

Professor O. Pick, of Surrey warns: "If there are to be further cuts in real income, we will have to reduce our activities still further, thus multiplying the adverse effects of all that has happened since last July."

The survey, pages 8 and 9

Biologists fall into mousetrap

from Peter David

WASHINGTON

Hundreds of published research findings in biology may be wrong because scientists used the wrong kind of mouse, two American research teams said this week. The teams claim to have discovered that one of the world's biggest producers of laboratory animals had provided mice which were the genetically pure strain they were supposed to be.

The discovery was made at the University of Wisconsin-Madison in the course of a nine month experiment on the development of tumours in mice. The research team, headed by Professor Robert Auerbach, began to suspect that inconsistencies in their findings were caused by something wrong with the test mice.

In experiments to check the genetic properties of the mice – provided by Charles River Breeding Laboratories Inc – the Wisconsin researchers concluded the company had shipped a strain of mice known as "BALB/C" which in fact possessed different genetic characteristics.

"This is a major contamination problem of almost inestimable consequence." Professor Auerbach, *professor of zoology at the university, said. He said "BALB/C" mice had become the standard laboratory animal in tumour, biology and immunology because of their tendency to get cancer.*

The university's findings have been separately replicated by immunologists from the University of Minnesota, who used mice ordered directly from the Charles River Company and described as "BALB/C". The Minnesota tests confirmed the mice were a mixed population, not a pure strain.

Details of the Wisconsin and Minnesota experiments are contained in this week's edition of the journal Science. According to Professor Auerbach many published *experiments* based on the Charles River "BALB/C" mouse will remain suspect because the mice are no longer alive and cannot be tested for genetic purity.

Scientists for Charles River Breeding Laboratory Inc have not yet been able to confirm how widespread th genetic impurities might be. Writing in Science, the company claims its genetic monitoring programme is thorough and extensive.

The Charles River company has a British breeding house in Kent, but it is not yet known if any animals supplied *in this country may have the* same genetic impurity.

The company is not a big supplier in Britain. The main British research sponsors like the Medical Research Council and the Imperial Cancer Research Fund have their own breeding houses.

Arbitrator recommends 5 per cent

by John O'Leary

Ministers are *considering an arbitra*tor's recommendation of a 5 per cent pay rise for university lecturers. The second and final stage of negotiations *is likely* to take place in the next few weeks.

Sir Alexander Johnston, chairman of Committee A of the negotiating machinery, stepped in when talks between vice chancellors and the Association of University Teachers became deadlocked. The vice chancellors had been unable to improve their 4 per cent offer to meet the AUT's claim for a 12 per cent increase.

It is only the third time that the Committee A talks have had to go to arbitration, which is automatically binding on both sides. The union claimed that university workers were the only group still being held to the Government's 4 per cent pay ceiling, while the vice chancellors insisted that they could not fund bigger increase without additional Government help.

Sir Alexander's 5 per cent award is in the range of recent public sector settlements but would require a softening of the hard line adopted so far by Sir Keith Joseph, Secretary of State for Education. No date has yet been set for a meeting of Committee B, which includes the Department of Education and Science and will take the final decision.

The AUT has asked for urgent consideration of the award by Sir Keith and there is expected to be little delay. Mr Laurie Sapper, general secretary of the association, said: "We would regard the offer as *unsatisfactory because it is not quite* what the rest of the public services have been getting, but we are bound by the arbitration."

University clerical workers met the *vice chancellors yesterday in a new* attempt to improve upon an offer of 3.68 per cent, which they claim to be the lowest in the public sector. They have been told that 4 per cent is the *maximum available, in response to a* claim of 12 per cent.

Leader, back page

Joint entry system on the way

by Karen Gold

A joint application system for entry to universities and polytechnics could come about as links grow between the University Grants Committee and the National Advisory Body, Mr *William Waldegrave*, under-secretary for higher education, told the Commons Select Committee for Education, Science and the *Arts*.

The links meant that for the first time there was an overall view of the higher education system, he said. Their first priority was to work together on particular subjects and with other institutions, such as the Science and Engineering Council.

Later they would use a common data base and perhaps the same computer, although they would keep separate administrations. "I could conceive we could get into the territory of a common entry system, but that's a long way ahead," he said.

As part of these changes, the entirely confidential relationship between the Government and the UGC would become more open. "We are going to try and define two areas. I *think* the committee *wants to retain* and needs to retain a confidential and bilateral relationship with the Secretary of State. But the discussion and the development of a strategic framework *should be done we think* more openly," Mr Waldegrave said.

Earlier, the Secretary of State for Education, Sir Keith Joseph, refused to give the select committee a copy of figures *provided for local authorities* which predict possible large cuts in the teaching force. "I would object to a working document being released officially, even if copies *have been furtively distributed*," he said.

Local authority officials now consider the estimate of 2,000 compulsory redundancies in higher education *contained in the Expenditure* Steering Group on Education's report to be understated because the cost of compensation payments for non-teaching staff was ignored. Mr *Michael Heseltine*, Secretary of State for the Environment, was unsympathetic to their pleas for larger grants at a meeting this week of the Consultative Council for Local Government *Finance*.

David Martin on Northrop Frye on the Bible, 12

Krishan Kumar on outsiders, 10

Bernard Crick reviews The Beggar's Opera, 11

Adults lose dole money for time spent studying

Employment officers are withholding money from people on the dole who attend any daytime adult education classes despite a recent Government climbdown over those in the same position on supplementary benefits.

Social security *claimants* will continue to be allowed to study for up to 21 hours per week without losing their entitlement benefit. But the Department of Employment regards even one class as reason enough to disqualify a person from unemployment benefit for a day on the grounds of unavailability for work.

The little-known regulation was discovered by the Association for Adult and Continuing Education, after a 23-year-old woman contacted them. She had asked her Surrey employment office to change her "signing-on" day, as it coincided with one of the three afternoons she attended a typing course.

Instead her benefit was *cut from* £22.50 to £11 a week, as she was told she would not be considered available for work on those three days.

The Department of Employment this week confirmed that claimants should tell their employment benefit office if they attended classes *on a particular day, were therefore* unavailable for work and would not claim benefit for that day.

It was possible for claimants to change their "signing on" day at the discretion of individual unemployment officers, but if a claimant did this over time he or she might be investigated, it said.

The regulation applies specifically to people claiming unemployment benefit and not social security. AACE *general secretary Ms Lucia* Jones said this meant if applied to adults rather than young people, since the latter tended not to build up enough National Insurance *contributions* to qualify for unemployment benefit.

Edinburgh takes redundancy step

Edinburgh University has taken the first step towards declaring compulsory redundancies by ratifying the deans' power to select departments and individual posts for redundancy.

Dr John Burnett, Edinburgh's principal, issued a statement that "despite recent inspired reports in the press, no legal and constitutional change in the role of the deans has been envisaged and none has been presented to the court." But secretary of the Association of University Teachers, Dr. Adrian Graves, said the court's action was very serious,

Cuts 'endangering research'

by Olga Wojtas
Scottish Correspondent

A former vice chairman of the University Grants Committee has warned that academic research faces cuts of £50m.

Professor Sir John Gunn, retiring professor of natural philosophy at Glasgow University, told a graduation ceremony that research was jeopardized as a result of the dual funding system.

The government, Sir John quoted, had said it wished "to give protection to the support of basic science, an activity which underpins further development and is a particular strength of the United Kingdom".

But the Government had foolishly thought that science's strength could be preserved by maintaining the income of research councils while cutting the other side of the dual support system, the general university income, he said.

"Unfortunately this is not so, as the general university budget has to provide the floor of research support, without which the research is frustrated.

"My guess is that the resultant loss to research income over all universities may amount to as much as £50m, about one third of the direct income from research councils," Sir John said.

The Government's treatment of science was also condemned at a graduation ceremony by Dr John Burnett, principal of Edinburgh University.

Universities were increasingly advised to remember that the training of scientists was a major investment, but the Government's support of this investment was disappointing and inadequate, Dr Burnett said.

During the 1970s, even before the recent cuts had been implemented, expenditure on laboratory and departmental running costs had dropped by 20 per cent. The equipment grant became at least a third less than adequate, and universities were unable to increase their library purchases, he said.

"So although research council and other income has strictly increased over the same period, the university base has been steadily and now drastically eroded," Dr Burnett said.

Edinburgh was a national centre of excellence in microelectronics, in particular the design and development of microchips, he added. Since 1978 the Science and Engineering Research Council had provided £2.3m, but running costs and buildings were Edinburgh's responsibility.

But over only two years, the state of North Carolina had invested more than £10m on the Microelectronics Centre of North Carolina, which uses software developed by Edinburgh.

"How can we compete?" Dr Burnett asked. "But the most serious blow of all is the stasis that will now overtake the universities as a consequence of the cuts. It has been calculated that an input of about 100 to 200 staff per annum is needed to maintain the present tempo of scientific activity at its present level. I do not see this being achieved."

News in brief

British Council needs extra £3m

The British Council will have to close more of its overseas offices unless the Government provides an extra £3m to compensate for inflation abroad. Sir John Burgh, director general of the council, presenting his annual report this week, said the request was being considered sympathetically.

Cuts of £1.5m will have to be made next year in any case as the third stage of a programme of economies agreed in 1980. The Government gave an assurance then that there would be no further cuts in real terms during the rundown, Sir John said.

CVCP criticized

A joint session of the Mind Association and Aristotelian Society, the two senior philosophical societies of Great Britain, unanimously passed a motion criticizing the Committee of Vice Chancellors and Principals' proposals on tenure.

According to the motion, ". . . to alter university statutes to allow dismissal of academic staff on grounds of redundancy was a dereliction of their duty to protect the academic freedom of their staff, consequent upon security of tenure for a suitable term (with proper safeguards for misconduct, redundancy of the kind that could be caused by financial exigency, etc.) after probation. We wished to draw attention to the fact that there is no reason for restricting tenure in the way proposed".

New councillors

Four new members of the Medical Research Council were announced last week by the Department of Education and Science. They are Sir Michael Stoker, vice president of the Royal Society and president of Clare Hall, Cambridge, Professor I. Bouchier of Dundee University, Professor M. Epstein of Bristol and Professor C. Dollery of the Royal Postgraduate Medical School.

Their appointments run from October 1, when Professors Dawes, Evans and Hoffenberg and Dr Brenner retire.

NUS protest

The National Union of Students has backed demands that leaders of the Federation of Conservative Students, including chairman Mr Brian Monteith, should be removed following an inquiry which revealed evidence of widespread malpractices. NUS president Mr Neil Stewart, has told Tory Party chairman Mr Cecil Parkinson in a letter that few people in higher education have confidence in Mr Monteith as an honest representative of student opinion.

A degree better

Student from BEd courses have better job prospects both in teaching and in other fields than other graduates, according to a new publicity leaflet, *Teacher Training in a Polytechnic of Course*, produced by the Polytechnic Council for the Education of Teachers.

Riverside View . . . presented by one of the students on the one-year theatre design course at the Riverside Studios in Hammersmith, London this week. The exhibition of their work is open from 11 am to 10.30 pm until Sunday.

Italian staff threaten to quit

by Ngaio Crequer

Members of the Italian department at Bedford College have threatened to resign to enable their reappointment at University College, rather than be forced to merge with Royal Holloway College.

The row, caused by the proposed institutional merger of Bedford and Royal Holloway, threatens the whole future of Italian at London University.

Bedford and University College Italian departments have collaborated with each other since 1949. The languages subject area review committee recognized the close cooperation and recommended a formal departmental merger, and the two departments agreed to merge on the UC site.

But Bedford College never agreed and the Bedford/RHC merger will mean an end to the Bedford/UC collaboration and also threaten the existence of the UC department, the oldest in Italian in Britain.

Without Bedford's assistance, UC would be a department of three or four and could not guarantee to maintain single or joint honours teaching. UC also has the best Italian library in the university, which it would be illogical to run down.

Further, UC would be unable to assist Birkbeck, the only other London college to offer Italian, which in its turn will be affected by staff shortages in 1983.

Bedford College has taken the view that to allow departments to secede, as Dutch, mathematics and the classics have indicated that they would prefer to do, rather than merge would be to disturb the integrity of the college as a whole.

Italian staff protested about the transfer to Egham at a Bedford academic board meeting and it was decided to postpone any decision until September. Provisionally, Italian is scheduled to move to RHC in October, 1983.

Their threat to resign would be made only as a last resort, but it is understood that the possibility has already been raised with the provost of UC, Sir James Lighthill.

Professor Giovanni Aquilecchia, head of the Bedford department, said this week: "We object to the fact that we should move at all (to Egham) because we are so strictly linked with University College, we function like a single department. To split us would amount to the end of the teaching of Italian at London University."

Ironically, the college merger would split up one of the good examples of inter-collegiate cooperation, which the SARC reviews were trying to promote.

A number of people have written to professor Randolph Quirk, vice chancellor of London University, arguing the wisdom of maintaining the Bedford/UC arrangement, among them Professor John Cruickshank, the chairman of the SARC inquiry.

Top marks for polys after visit

by Felicity Jones

Excellent reports from the Council for National Academic Awards have given a boost to the academic reputations of Sunderland Polytechnic and the Polytechnic of the South Bank.

A CNAA visiting party expressed a lot of confidence in the development of Sunderland Polytechnic since its last review. In 1975, the polytechnic was criticized for being geographically isolated and inward-looking. Since then there has been increased involvement with the local and international community.

The visitors endorsed the polytechnic's own analysis of its past problems and congratulated it on its preparedness to face up to future challenges and difficulties. The revised academic and committee structures were found to be functioning well and a happy balance had been struck between central control and the faculty autonomy.

Effective plans for the future were being drawn up by the academic board and the CNAA was confident that further development to match resources and planning at faculty level, particularly with regard to teaching hours, research and staffing, would be carried through effectively.

The course approvals committee was developing a rigorous and demanding approach to course evaluation and encouraging staff to be more critical.

Rector Dr Peter Hart said: "By CNAA standards, the report places the polytechnic in the upper echelons of those institutions endorsed by the council as mature academic communities."

He hoped that the acknowledged standing of the polytechnic would have some bearing on national decisions being taken by the National Advisory Board in its restructuring of public sector higher education.

The Polytechnic of the South Bank has also been given a clean bill of health following a highly critical initial visit 20 months before.

The visiting party was pleased with changes which had been introduced and thought the future held great promise.

Faculties now have effective control over their own resources. Although the new course monitoring system had not yet run full cycle, the staff believed the system would work efficiently.

The committee structure was found to have made real progress and was now considered to be in a position to handle and answer NAB directives and questions.

Students to move house

by Paul Flather

The National Union of Students is set to move from its central London headquarters in one of the final acts in its four-year programme to remain viable.

The NUS, which has 1,200,000 members, is poised to buy new premises above a furnishing store in Holloway Road, North London, for an estimated £350,000. The union then plans to rent out its offices in Endsleigh Street, valued at more than £1m, on a five-year lease.

A glossy handout advertising the fine period terrace in an ideal location" has already been prepared and a For Lease sign has gone up outside. It was recently refurbished for £275,000 after threats to condemn the property.

NUS has been investigating ways of cutting costs since 1978 when the first of a series of so-called development plans was thrown out by its national conference.

Almost all the union's income comes from subscriptions from its 750 student union members. This has fallen in recent years because of falling student numbers and a drop in the value of the grant. In 1980-81 it predicted a budget deficit of 10 per cent.

The national conference approved a development plan, *The Shape of Things to Come*, prepared by the then president, Mr Trevor Phillips, stating that "the salad days for student unions and therefore for NUS are over".

The union severely reduced the number of campaigns it would fight, reorganized its structure and started cutting staff.

The union currently employs about 70 staff, down from a peak of about 150 in the mid-1970s before NUS Travel went bankrupt in 1976 with a trading deficit of £78,000. This was the first serious signal that the union's boom of the late 1960s and early 1970s was on the way out.

Redundancy payments were taken out of the union's reserves, and new staff have been hired on contracts which do not involve automatic salary increments for each year of employment. This structure had led to a high salary bill.

NUS now expects a reasonably healthy £200,000 balance for 1982-83 with income from subscriptions projected at £1.5m, and expenditure at £1.3m. Subscriptions vary from £94 a year for the smallest union to about £30,000 for large universities like Leeds and Manchester.

Lecturers attack BEd report

A Lancaster University report on the BEd degree has been strongly criticized by polytechnic teacher educators for being inadequately researched and offering conclusions based on pure opinion.

The Polytechnic Council for the Education of Teachers says this has serious implications because the conclusions were used in evidence by the Advisory Committee for the Education and Supply of Teachers before its second report to the Secretary of State for Education.

The report, *The BEd degree and its future* by Professor Alec Ross and Dr David McNamara, of Lancaster's school of education, was the result of research sponsored by the Department of Education and Science.

It said expansion or reduction of the BEd degree must be based on the quality of institutions rather than upon classes of institutions such as polytechnics or diversified colleges. It stressed that staff teaching BEd courses were predominantly middle aged with no recent teaching experience and that morale among staff was generally low.

The PCET now plans to present a full statement to ACSET, the DES and the Committee of Directors of Polytechnics to draw attention to the weaknesses in research methodology and the serious implications in using the conclusions of the report for political ends.

PCET members are also extremely concerned at the way the DES and Her Majesty's Inspectorate are now assessing in-service courses. Approval, it says, is based on qualitative judgments rather than in terms of teachers' needs.

Scientists' move fuels fears

The departure of two leading British geneticists to North American research companies is fuelling fears that Britain will lose the international competition to establish industrial biotechnology.

Dr Richard Flavell, head of the laboratory of gene structure and expression at the Medical Research Council's National Institute for Medical Research departed for Cambridge, Massachusetts, last week to begin work as scientific director of Biogen.

Professor Derek Burke, of Warwick University, leaves shortly to take up a post with the genetic engineering firm Allelix in Toronto.

It appears the new American venture capital companies can make offers which are hard for British researchers to turn down.

Staff disciplined over lost research cash

by Felicity Jones

Some members of staff at Trent Polytechnic have been disciplined following discovery of a discrepancy in the accounts of a research project.

An unnamed former senior member of the academic staff is also implicated and although the person has voluntarily resigned from the polytechnic Nottingham County Council is considering a civil court action to try to recoup the missing money.

Last April, the polytechnic director, Dr Ernest Freeman, called for an audit to investigate a suspected deficiency. It revealed that between August 1978 and April 1981, about £35,000 was unaccounted for. The polytechnic immediately managed to reduce the deficit by £10,000 and steps were taken to ensure that other research projects were not in a similar situation.

The police were called in but it was decided there should be no prosecution.

A further inquiry by an outside auditor revealed that a senior member of staff was primarily responsible, although the report did say "a lack of financial control of sponsored research projects was a significant contributory factor."

After this report, it was agreed to discipline the senior member and various other members of staff. However since the unnamed individual has been ill no disciplinary action has been taken and the person has since voluntarily resigned making further action unlikely.

Councillor Fred Riddell, chairman of the city education committee said the chief executive was considering a civil suit. He is convinced that sufficient steps have been taken to ensure the proper financial monitoring and supervision of research projects.

"As far as we are concerned, the matter is closed. There will be a full report to the education committee and the polytechnic council in due course," said Mr Riddell.

The polytechnic students are still unhappy about the secrecy which has surrounded the missing money and the staff involved. Student union president Colin Barnett said: "We realize it is a delicate matter but we should have been consulted as a matter of course."

Another reason why the matter may not be resolved easily is that the external auditors Messrs. Coopers and Lybrand have decided to refer it to the Environment Secretary under the terms of the Local Government Act 1972 section 162 because they believe there are reasonable grounds for thinking the cash deficiency was the result of wilful misconduct.

Scottish tenure 'not sacrosanct'

by Olga Wojtas
Scottish Correspondent

A secret document has revealed that the Scottish principals are opposed at academics having "unassailable tenure."

The minutes of the Conference of Scottish University Courts, attended in May by seven principals and senior university representatives, show agreement that financial exigency should be an adequate reason for declaring staff redundant, and that tenure is not a prerequisite of academic freedom.

But it was argued that readjusting "plentiful" resources within a university did not justify axing posts.

The conference disagreed with proposals from the Committee of Vice-Chancellors and Principals that academics should not hold an established post until they had served for eight years: this would deter recruitment since it compared unfavourably with contracts in industry and commerce and staff in unestablished posts would be vulnerable when redundancies were necessary.

But, the minutes record: "It was felt that continuation of the present system, whereby a very short probationary period was followed by virtual tenure for life, was not in the universities' interests."

The general public, industry and commerce had no sympathy with the demand for tenure where legislation existed to guard against unfair dismissal.

There were moves at the meeting to bring the Scottish universities into a more formal grouping, strengthening their links with the rest of Scottish education.

This is a result of the recent proposals from the Council for Tertiary Education that a new council should be set up, coordinating all Scottish tertiary education outside the universities.

Edinburgh's vice-principal, Professor N. C. Hunt, pointed out that although universities were excluded from the council's brief, it was concerned with links between them and other tertiary institutions.

Sir Douglas Haddow, chairman of Heriot-Watt's court, said a new council would inevitably mean formalizing the role of the Scottish principals, with a permanent secretary, and the principals were urged to consider this.

Stirling's principal, Sir Kenneth Alexander, felt a Robbins-type of review of all Scottish tertiary education was needed.

The operation of the UGC should be re-examined, he said. It was adequate when financial circumstances were favourable, but had proved itself remote, overstretched and inadequately informed in a time of financial crisis, and the secrecy of its proceedings has caused embarrassment in political circles.

Sir Kenneth added that the present relationship of the Scottish universities with the UGC led to separation within the Scottish education system.

The conference generally agreed, however, that despite the UGC's imperfections, it was preferable to rule by Government departments or politicians.

Fred Silvester

MP proposes merger

A Manchester MP has written to Salford University and the University of Manchester Institute of Science and Technology proposing that their councils discuss merger.

Mr Fred Silvester, Conservative MP for Withington, said this week that he had spoken to people in both institutions and was satisfied that there was latent support for the proposal, although because people were loyal to their institution, it needed an outsider to raise the issue.

His letter says that they have a "once in a lifetime" opportunity to start a new institution, a national, technological university. Although there would probably be advantages of economy and efficiency he foresaw a new institution attracting more rather than less money.

Its combined strength would enable it to sustain departments which otherwise might not be viable, shared facilities and combined intake would preserve a range of disciplines, and it would have strong links with industry.

Mr Silvester raised the point at Commons question time on Tuesday when Mr William Waldegrave, under secretary of state for higher education, said any such merger would have to be a local initiative.

Professor John Ashworth, vice-chancellor of Salford, has written to all staff saying that any proposal would need the most careful consideration and could only go forward with the wholehearted support of both institutions.

A spokesman for UMIST said that the question had not been discussed at any UMIST committee, or raised with them.

New business school to open at OU

The Open University is to establish its own business school backed by the British Institute of Management, to start with two courses in management skills and accounting next year.

Sponsorship of £110,000 has come from the Foundation for Management Education for the courses, which will be paid for by students or their firms at full-cost price. (Between £150 and £250 for the longer 100-hour management course; less for the 50-hour accounting one.

Both courses will use correspondence materials, television programmes and weekend schools, providing the equivalent of a two-to-three-week intensive course. Predicted numbers for the first year are 1,000, but there is capacity for more if demand is greater, an OU spokesman said.

Companies are also expected to use course materials in their own training programmes. The academic standard will be an undergraduate one, but because the courses are considerably shorter than ordinary OU courses they will not form credits towards a degree. But there will be diplomas.

Liverpool staves off threat of cuts to colleges

Liverpool City's cash crisis which was threatening the future of courses at the polytechnic and three local colleges of higher education appears to have been averted.

Originally the polytechnic and the three colleges, City of Liverpool, I. M. Marsh and F. L. Calder, faced cuts of £3.4m in the remainder of this year following a shortfall in the allocation from the Advanced Further Education pool.

All four institutions were under extreme pressure because the city council feared incurring the 50 per cent penalty imposed on overspending authorities.

But at a meeting of the authority's policy making committee this week, it was accepted that savings of £2.2m put forward by the four institutions was the maximum they could reach without damaging provision beyond repair.

This followed the discoveries that lesser savings were actually needed as a result of miscalculations on staff salaries, and that the remainder could be made up through a contingency fund.

Two years ago Liverpool faced a fairly similar situation when as a result of miscalculations, it feared having to merge or close a college of higher education.

The whole matter still has to go to the full council next week for final approval. But it is understood that discussion of further rationalization such as pegging entry for September 1983 courses will wait until autumn when the Secretary of State for Education makes a decision on teacher training cuts, and the National Advisory Body has reported on national provision for courses.

The polytechnic still faces finding savings of £1.5m instead of the original £1.9m. But it has decided not to axe September 1982 entry to around eight courses following fears of legal action from students who had been promised places.

City of Liverpool College is to make cuts of £500,000 this year and £200,000 next year, an improvement on the £1m it was originally asked to find.

Nevertheless, the college still faced voluntary redundancies which will affect its staff: student ratio badly, as well as cutting the number of options and part-time inservice courses it runs.

The authority says that the merger of the I. M. Marsh and F. L. Calder colleges, which specialize in home economics and physical education, with the polytechnic will definitely go ahead.

Two more quit as PCL prepares for recovery programme

Further resignations have followed the announcement last week that Dr Colin Adamson, rector of the Polytechnic of Central London, had finally yielded to pressure to leave.

At a meeting of the court of governors this week, the chairman, Mr J. Walter Oakley, and vice-chairman, Mr Frank Instone, said they would not be standing for reelection.

Originally Mr Oakley said when he was elected three years ago that it would be his last period in office but then decided to remain another year to see through the polytechnic's recovery plan. He changed his mind when the rector decided to relinquish his post.

Last week, it was disclosed that Dr Adamson is to take a year's sabbatical and the rector's post will be advertised in the autumn.

The meeting of the court of governors accepted his resignation and heard that the Inner London Education Authority will be making financial and other provisions for his sabbatical leave.

The new chairman of the court of governors is Mr David Brough, a middle of the road long-serving governor acceptable to both the old and new guard who represented the governors on the joint advisory committee set up with the ILEA to sort out the internal problems.

He will take up the post on August 1. The vice-chairman will be Mr Bala Ghana Pragasam, vice-chairman of the ILEA further and higher education committee, who is expected to bring some fresh motivation to the governing body.

Five governor posts remain vacant and one name being floated to fill one of the vacancies is Mr Christopher Price, Labour MP for Lewisham.

The court of governors accepted the six points put forward by the joint advisory committee as part of the polytechnic's recovery programme. These were:

- The appointment of a permanent rectorate;
- The filling and upgrading of the post of secretary;
- The appointment of a personnel officer, one of whose first duties will be to investigate and improve industrial relations within the polytechnic;
- The removal of financial responsibility from the rector to the secretary;
- All non-block grant activities to be fully considered and approved by the court of governors;
- Progress with the implementation of the recovery plan to be fully monitored in detail by the joint advisory committee.

Grant campaign

A campaign for a minimum educational grant for adults, including the unemployed and housewives was launched at the Association for Recurrent Education annual conference.

University computer boost

by Jon Turney
Science Correspondent

A boost for university computer research was announced yesterday by International Computers Ltd. ICL's new University Research Council will have an initial budget of six figures annually, to promote research with potential applications in industry.

Mr Colin Hayley, the company's director of product planning, explained the ICL recognized that future profits depended on a flow of products, and the new initiative would help close the gap between the research capacity of the universities and commercial production.

The six member council will comprise Mr Hayley, two other ICL executives, Mr Peter Hall, an ex-director of ICL and now president of the British Computer Society, Dr Geoffrey Manning, director of the Science and Engineering Research Council's Rutherford-Appleton Laboratory and Mr Alan Bogshaw, a former director of ICL's development group.

ICL will require access to the results of council-funded work, but there will be no restrictions on normal academic publication, though any subsequent development contracts would be subject to commercial confidentiality.

The council has already begun discussions with several academic departments, and expects to support probably four major areas. These will almost certainly include communications and computer networking and expert systems – computers which can mimic human decision-making by using rules of inference.

Their move into this field provides a timely response to the British Computer Society, which has just published a report calling for greater management appreciation of the possibilities of expert systems, and for more goal-directed research involving links between research centres and innovative companies.

SSRC leads by example

The Social Science Research Council will publish its first annual survey in September of how long university graduates take to complete their theses, an issue that has aroused great controversy in the past year.

Publication of completion rates is one of a series of points made by the SSRC in its own submission to the Government this week to demonstrate how seriously and effectively the council is responding to Lord Rothschild's recent review of SSRC work.

The SSRC now faces a testing wait for the final word from Sir Keith Joseph, the Secretary of State for Education, on its future. Mr William Shelton, under-secretary of state in the Education Department, told the House of Commons this week that the date for submissions to the Government had expired on Monday, and his colleagues would report in due course.

He was asked by Mr Phillip Whitehead, Labour's higher education spokesman, to comment on Lord Rothschild's remark that to close it would be an "act of intellectual vandalism." He replied that it showed Sir Keith's "open-mindedness" to call for the report.

The SSRC's submission gives detailed answers to all 25 recommendations in the Rothschild Report addressed to the council, including first comments on whether it should move fast towards American-style PhDs.

The SSRC is cautious about recommendations that it should initiate PhDs with a rigorous first year of taught courses followed by an examination, and two further years devoted to a thesis "in which competence is to be as important as originality."

It has already approved the philosophy of more taught work, but has pointed out that even in America there is no unified PhD system.

Geography faces sharp decline

by Paul Flather

Geography, one of the more popular degree courses, is set for a "serious decline", with a drop of 5 per cent in the number of places on offer next year, according to a survey by the Geographical Association.

The association, which represents 6,200 geography teachers and students has warned that this decline in provision will blight the opportunities of school-leavers and of employers keen to recruit geography graduates.

The survey of 96 departments in universities, polytechnics, and colleges, completed last month reveals a predicted drop in the total university intake in October of 164 places (5 per cent) compared with last October, a drop in university lecturers of 21 (4 per cent), and similar falls in clerical and technical staff.

There will be slightly more places available at polytechnics and colleges but not enough to offset the drop in universities. Staffing at colleges will fall, while all institutions face widespread cuts in funding of fieldwork, book purchases, maps and equipment.

The survey comes as applications to read geography continue to increase. The Universities Central Council on Admissions (UCCA) reports a 6 per cent increase in applications for first degree courses next October compared with last year. Geography is one of 16 subjects said to have "substantial" increases in applications.

Mr Michael Williams, a university lecturer and joint honorary secretary of the association said, decline in geography provision would have severe effects on school-leavers.

"Geography is very popular in schools, attracting many able youngsters. They assume they will have access in higher education to continue their subjects, and take up careers. This formula is now breaking down."

He said there were increasing numbers of varied jobs available for geography graduates in marketing, finance, planning, local government, the civil service, insurance and banking. But with fewer graduates the competitive edge would disappear.

He also urged universities not to regard geography as a social science, which generally face more severe cuts than the natural sciences. Geography was a hybrid subject. At Manchester, for example, students can study geography in either the arts or sciences faculty.

Details of the survey have been sent to the University Grants Committee and to all heads of geography departments. The results will be published in the association journal in October.

Salford raises new trade

Salford University will soon announce the first of a series of new professorships, just over a year after the University Grants Committee cuts dictated extensive staff and student losses.

But the new appointments will not be paid for by the university. The plan is to attract senior executives from big industry, who will retain their present responsibilities while serving Salford's academic needs.

Salford's vice chancellor Professor John Ashworth told a recent graduation ceremony that the first of the new chairs will be established in collaboration with British Gas, and others will follow.

Salford already runs a course in natural gas engineering and the chemical engineering department has very close links with British Gas. The corporation confirmed last week that is had agreed in principle to fund the new post, although it is not yet known who will be appointed.

The corporation will draw up a shortlist of suitable candidates from its senior management for discussion with the university, and both sides hope the post will be filled before the end of the year.

This will be a unique arrangement for a British university, and Professor Ashworth said: "it will bring into the university a kind of academic more akin to those found in the *technischehochschule* in Germany than hitherto in the United Kingdom."

Cartoonist Posy Simmonds lends a hand to the University of Manchester Institute of Science and Technology in promoting a new "Management Development for Women" programme which begins in September. It consists of three separate one week courses looking at management roles, interpersonal and group skills, career planning and women in management. It is aimed at women who would like to take a more senior job, or take the first step into management. No formal qualifications are needed but job experience is essential. Details from Dinah Shelley, department of management sciences, UMIST.

Leverhulme award

Three Leverhulme fellows in engineering practice for 1982/83 have been announced by the Committee of Directors of Polytechnics. The are Mr P. Blackey from Oxford, Dr K. Henthorn from Trent and Dr A. Higginson from Birmingham polytechnics.

Union call for grants for all

The legal right to an education grant for all people aged 19 and over is called for in a motion submitted to this year's Trades Union Congress.

The National Association of Teachers in Further and Higher Education wants the TUC to agree a campaign seeking the right to up to a year's grant-aided education and training for all over-19s, plus leave from work.

Natfhe also asks the TUC to oppose education for adults being made self-financing. This, it says in the motion, denies access to those unable to pay. Instead provision should be funded on the basis of need.

The association expresses concern at the woefully inadequate education and training for the long-term unemployed. It calls for a programme which acknowledges jobless adults' dignity and self-respect, and pays them no less than the local rate for the job.

This programme should also provide greater quantity, quality and range of provision, as well as more employment and better education, training and work experience to meet the diverse needs of individuals and groups, the union says.

In another motion, Natfhe asks the TUC to agree a programme which will further equal opportunities for women in trades unions. It says that although some progress has been made in this direction, recommendations for positive action by affiliated unions should be drawn up and monitored regularly.

The association also calls for a locally-organized day of action, sponsored by the TUC through trade union branches, regional councils and trades councils to highlight ways of increasing women's participation in the trade union movement.

Scot attacks rise for London students

The chairman of the Scottish National Party has criticized an increase in the living allowance for students in London which does not apply to students elsewhere.

Mr Gordon Wilson pointed out in a letter to Mr William Waldegrave, under-secretary of state for higher education, that this year's allowance for students in London who were living away from home was £290 more than the allowance for other students away from home, but will rise next session to £305. The London grant had risen by £275 to £1,900 while the increase for students outside London was only £60.

All students will receive the same allowance of £1,225 if they are living at home.

Mr Wilson wrote: "I well understand that students in London, like many people who work in London, get an extra allowance because of the cost of accommodation. There are many areas in Scotland in which people deserve a similar allowance to cover the higher cost of living in Scotland.

"However, in this particular case, I am angry because the differential between the London living away from home grant and the 'elsewhere living away from home grant is increasing.

"In other words, London students are being further favoured."

Felicity Jones reports from the conference of the Council of Local Education Authorities

Facing an uneasy future

General unease and wariness pervaded the Council of Local Education Authorities conference in Sheffield last week as delegates awaited the National Advisory Body for local authority higher education's plans for restructuring the sector.

This was reflected in the only resolution passed which was directly relevant to higher education proposed by Wakefield local education authority. The motion welcomed the progress which the NAB had so far made in its attempts to change the previous pattern of course approvals and create new initiatives, but urged vigilance to ensure a continuing partnership between central government and local authorities aimed at helping higher education to adjust to changing needs.

The conference also called on the Government to resist the urge to use the body simply as a means of reducing resources for higher education.

Councillor John Pearman, chairman of Wakefield education committee, said that those who supported the body were "very suspicious and cynical" about its motives. He called on those involved in the NAB to do everything possible to ensure that forthcoming developments were positive, not negative.

Councillor Maxwell Bird, chairman of Humberside education committee stressed that the local authorities would be watching the body with "enormous vigilance" since there was a widespread suspicion that is had been introduced to put developing higher education at risk.

The opening speech of the conference made by Mr Christopher Ball, chairman of the NAB board, seemed to raise more anxieties than it allayed. Pronouncements such as that over the 10 per cent cut in overall budget which will lead to the closure of colleges and, maybe, one or two polytechnics were unsettling.

So was the reminder about the 68 courses which are under review with the threat of closure in September.

Mr Ball did not pull his punches and his statements about not looking to NAB for "instant solutions, cut and dried national plans or detailed directions handed down from on high" did little to soften the blows.

Deliberate comments, such as the warning that if authorities did not come up with plans to meet a suggested 20 per cent cut in funding then NAB would advance its own plans with or without local guidance, were intended to impress delegates with their toughness.

This intimidating ploy succeeded to such an extent that Councillor Nicky Harrison felt the need to remind delegates from chair not to give powers to NAB which rightfully belonged to the Associations of Metropolitan Authorities and County Councils.

She cautioned that the "honeymoon period" with NAB was almost over and the time was rapidly approaching when l.e.a.s would have to make some unpleasant decisions.

The regional advisory councils were given small comfort when Mr John Bevans secretary of the NAB outlined their fate if they failed in the short-term planning of projected cuts with the l.e.a.s. The alternatives were to continue with the RACs; continue with a modified structure or to structure down from the top to provide a regional compnent of the NAB. He said all three alternatives would come into play if the RACs failed next spring.

He reiterated, however, what he has said in private and publicly that the Government's expenditure plans seemed likely to do little to disguise the rundown of the sector.

The principle that teaching came before research in the public sector and that there was little chance for introducing a "dual-support system", came in for some criticism from the floor.

Disapproval of financial plans

Local education authorities clearly expressed their disapproval of the Government's proposals for block grant funding.

In a lengthy debate on three motions put by Nottinghamshire, ILEA and Wakefield, speakers from all parties cast doubt upon the Government's proposals which were contained in the separate funding appendix of the Green Paper, *Alternatives to Domestic Rates*.

Nottinghamshire education authority's resolution welcomed the initiative taken by the Government to examine alternative means of financing local government but urged that no arrangements should be made to reduce local control and determination of the education service.

Along with the ILEA motion, the resolution said that a block grant for education could only lead to more centralization of power. The resolutions were passed unanimously.

Councillor Fred Riddell, chairman of Nottinghamshire education committee said: "The decisions should rest with the people in the area."

Education authorities sympathized with the Secretary of State's concern for education standards in certain parts of the country, said Councillor John Wears, vice chairman of Durham education committee. "But the proposals are dangerous, because they will be in a position to control what is spent," he said.

The leader of the ILEA, Bryn Davies said that the block grant was not about tighter government control but about "holding down and cutting education expenditure".

The secretary of the National Advisory Body for Local Authority Higher Education, Mr John Bevan said that they faced a very real danger.

"We are putting our heads into a noose and not into the hands of the DES but the Treasury because it is not simply a matter of finance but of political power." Mr Bevan went on to point out that it was future governments which might abuse the trust.

A third motion from Wakefield education authority called for urgent discussion between the two local government associations and the Government over the implications for education of the latest White Paper on spending cuts which poses a particular threat to teaching levels.

Chilver to chair NAB's industry group

The appointment of Sir Henry Chilver to chair the industry group of the National Advisory Board for Local Authority Higher Education was announced by Mr Christopher Ball, the board's chairman.

This marks the setting up of the sixth of the working groups which meet and report directly to the board on specific areas of concern. The industrial, commercial and professional liaison group will advise the board on what industry and its employers require from higher education.

In his speech, Mr Ball struck a note of caution over the call for a decisive shift towards science and technology. He pointed to the vacant fields due to low student demand, and were acquainted with the principles of science and technology.

Felicity Jones looks at the latest figures in the Polytechnic Finance Officers Group's new 'red book'

Book thrown at big spenders

Teesside, North East London and Brighton are the most expensive polytechnics to run, according to the latest figures.

The fifth report of the Polytechnic Finance Officers Group gives a detailed comparative analysis of actual expenditure, income and unit costs for 1980/81 and estimated costs for 1981/82. It reveals that Teesside Polytechnic leads the expenditure table by spending £3,465 per student.

It is closely followed by NELP which has always been among the high spenders and topped the league in 1976/77 when the PFOG report was first made public. Close on its heels are Brighton and Preston polytechnics which spend more than £3,000 per student each.

Contrary to their image, the Inner London Education Authority polytechnics defy the tags of inefficiency and expense, although comparison is impossible because the Polytechnic of Central London was the only one to submit no financial statements.

City of London Polytechnic proves the most economic-all spending £1,948 per student. Bristol and Leeds polytechnics are also near the bottom of the table. Estimates for 1981/2 reveal a similar picture with Teesside, NELP, Kingston and Brighton expected to be the most expensive to fund.

A shaft of hard economic reality has filtered through to the polytechnics and local authority colleges as they are faced with uncomfortable financial comparisons.

This is the first year in which financing has been based on a breakdown of subject groups with allocation from the Advanced Further Education Pool worked out on unit funding linked to student numbers.

Allocation of resources is broken down into three broad groups: workshop and laboratory-based courses, classroom-based courses and art and design. It is a system which has used for several years by the Polytechnic Finance Officers Group which annually produces its "red book" – a comparative analysis of expenditure and income for each of the 30 polytechnics.

It is primarily prepared for internal consumption but the Committee of Directors of Polytechnics now supports its wider circulation.

It is unfortunate that this year when the report takes on greater significance that it should be badly out of date. However, the next report should be published before Christmas.

Part of the problem is that the inner London polytechnics' year does not end until July while the rest finish at the end of March.

Before costs were broken down into units it was generally held that the larger the polytechnic the more economic it was to run. It is now accepted that there are at least two variables at work: size and academic factors.

Comparisons may be odious but they are nevertheless relevant. Teesside, North East London and Brighton are among those polytechnics which head the league table in actual expenditure per student in 1980/81.

They spend well over £3,000 on each student compared to the national average of £2,700. By unit, the same disparity of expenditure is reflected so that NELP tuition costs for each laboratory and workshop-based student is nearly £1,000 more than the average and nearly £1,500 over for art and design students.

There may well be local contributory factors for these anomalies but they cannot be completely explained away. The "red book" gives many factors, apart from efficiency and effectiveness, which can account for the variations.

These include:

- variations in the academic mix of courses;
- the number of sites;
- age and grading of staff;
- the use of facilities, like library and computer, as a community service;
- surplus resources, particularly due to rundown of teacher training.

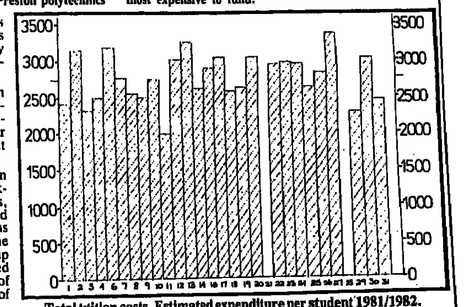
Brighton Polytechnic's director Geoffrey Hall gave three main reasons for their high expenditure: the spread over four sites including one building 26 miles away; the teacher training commitment and the two major mergers the polytechnic went through in 1976 and 1979.

"Quite frankly, I do not think that in terms of comparison with the university system that we are over-provided for. If anything we are under-provided," he said. Such a statement takes us into the realm of political decisions about merit, but it is nevertheless a point which should be borne in mind when talking about the quality of education rather than pure cost effectiveness.

Teesside Polytechnic's finance officer Mr Derek Puleston put their high expenditure per student down to the drop in students which they link directly with the bad report given several years ago by the Council for National Academic Awards.

He thought that later reports would show Teesside in a much more favourable light.

But in spite of the regional reasons which can be given for the financial disparities, the tide has changed whether the polytechnics like it or not.



Total tuition costs. Estimated expenditure per student 1981/1982.

Key to polytechnics: 1. Birmingham, 2. Brighton, 3. Bristol, 4. Hatfield, 5. Huddersfield, 6. Kingston, 7. Coventry, 8. Leeds, 9. Leicester, 10. Liverpool, 11. City of London, 12. Middlesex, 13. NELP, 14. North London, 15. PCL, 16. South Bank, 17. Thames, 18. Manchester, 19. Newcastle, 20. North Staffordshire, 21. Oxford, 22. Plymouth, 23. Portsmouth, 24. Preston, 25. Sheffield, 26. Sunderland, 27. Teesside, 28. Trent, 29. Wales, 30. Wolverhampton, 31. Ulster.

Allocations are reckoned now by the National Advisory Board at unit costs of 4,040 per art and design, £3,530 per workshop and £1,090 per classroom student. And these calculations will need to be reflected in the polytechnics financial management.

A PFOG chairman Geoff Dare-borough said: "Polytechnics now realize that unit costs of their own institution are much more critical and will have to be faced squarely".

It is mooted that NAB might introduce soon 11 or 12 subject groupings which will make comparisons between the polytechnics even more precise.

Those which are drastically out of step, it is suggested, will be able to visit their peers to compare performance or will be able to draw upon the findings of the PFOG working parties on premises, non-teaching staff and research costs, for instance.

It is this kind of work which makes finance officers and other managers resentful of Secretary of State for the Environment Mr Michael Heseltine's recent criticisms on efficiency and cost-effectiveness.

As one finance officer said: "He talks as if managers had never thought about this before.

"We have been suffering cuts for five years and looking at our performance for that length of time. The 'red book' is only the tip of the iceberg as far as introducing cost-effectiveness is concerned."

Fee increase hits poor hardest

Confirmation that increased fees cause reductions in student numbers and hit the poorest hardest comes in a recent study commissioned from Nottingham University's adult education department by the Department of Education and Science.

The study found that following five years during which adult education fees rose by 240 per cent in the area of Derbyshire monitored, the total number of students decreased by 28 per cent, from 7,100 to 5,124.

During the same five years, other factors which might affect enrolment, such as the balance of daytime and evening classes, the relative participation of men and women, the numbers of classes attended and the numbers paying reduced fees, all remained constant. The researchers concluded from this that the common thread linking changes in participation in adult education is an economic one.

The largest reduction in students was among the working class and those aged over 55. In 1976, students from the lowest social classes comprised 39 per cent of the total; by 1981 the proportion – already of a smaller total – was 2 per cent.

Participation by retired women also fell, by 4 per cent and by housewives by 3 per cent. In contrast, students from social classes I and II had increased their relative participation by 11 per cent and the non-manual working class by 4 per cent.

People returning to education after leaving school at 16 were the group showing the largest fall, from 60 per cent of students in 1976 to 38 per cent in 1981. The report, by Barry Elsey and John Daines of Nottingham University, concludes: "It seems that those who have fallen away from attending adult education have relatively less disposable income for consuming a service that has rapidly increased its fees. The findings point to a social class bias."

Strathclyde dashes takeover hopes

Hopes that Strathclyde Regional Council would take over residences at one of Scotland's axed education colleges have been dashed.

The region's education committee has announced it cannot afford the annual £330,000 to keep 300 students in residences at the former Hamilton College of Education.

Offers for the college buildings must be made by this weekend, and it is unlikely the Scottish Education Department, the college's former owner, will keep on the residences.

Student leaders from neighbouring colleges which have made increasing use of Hamilton's accommodation in recent years claim more than 200 students will be homeless.

Problems have also been caused by the axing of Callendar Park College of Education, part of which has been used by Forth Valley health board's college of nursing.

Overseas

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

DEPARTMENT OF BUSINESS ECONOMICS
E P BRADLOW

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Closing date for applications, 30th September 1982.

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North American news

Ottawa demands more control over provinces

by Peter David

The Canadian government is demanding a bigger say in higher education in return for the money it gives indirectly to universities through the provincial governments responsible for education.

A hard federal bargaining position was outlined in Ottawa last week by Secretary of State Mr Gerald Regan in the opening round of what is expected to be a series of delicate talks with provincial education ministers.

Mr Regan told the ministers that the federal government's share of university spending – currently nearly 60 per cent – was too high in view of the respective constitutional responsibilities of the two tiers of government.

Although Ottawa was determined to provide its "fair share" of university money, the federal government insisted on making the provinces more accountable for national funds they received through the system of Established Programme Financing Grants, he said. These are block grants from the federal government whose use is at present determined solely by the provinces.

The federal desire for closer control of the money it gives provinces through the Established Programme Grants has already encountered strong opposition from the provinces. They believe the Canadian constitution gives them discretion to spend the money as they wish, and intend to resist a move by Ottawa to specify how the funds are spent.

At last week's meeting, however, Mr Regan made it clear the federal authorities were prepared to introduce sweeping reforms in higher education financing, and exclude the provinces altogether, unless satisfactory changes in the Established Programme Financing Grants were agreed in time for legislation next spring.

In a 20-page policy document presented at the meeting, Mr Regan hinted the government would be prepared to introduce direct national funding for the universities in the absence of an agreement. At the very least, Ottawa wanted to disaggregate EPF funds for health and higher education and to ensure that provinces spent the money accordingly.

Last February the provinces rejected a federal offer to renew the EPF programme in return for starting talks on national objectives in higher education and a commitment to match federal spending increases on higher education with their own revenues.

Although provincial ministers did not react publicly after the latest meeting they have agreed to meet Mr Regan again in September and to help the federal government devise a new national scheme of student grants which would increase access to higher education for the less well-off.

Many provinces, however, are determined to resist any move which could be construed as a weakening of their constitutional responsibilities for education. Quebec has already warned Ottawa that it would refuse to accept federal money in future if it were accompanied by a diminution of provincial control.

A large number of academics, believe some central coordination of Canada's universities is essential to maintain the quality and balance of higher education in the face of an economic recession.

Last week the Social Science Federation, representing 12,000 researchers in all ten provinces, called for the creation of a powerful national advisory council to coordinate the priorities of the institutions and the federal and provincial governments.

Professor Gilles Paquet, the federation's president, said the proposal was intended to break the deadlock between the provinces and Ottawa on university funding. The scheme entailed creation of a Canadian Council on Research and Universities with a tripartite membership drawn from the universities, the provinces and the federal authorities.

"We have come up with the type of cooperative arrangement we think most suited to Canada today, but we are not hung up on the details of the institution. If someone can come up with a better model we will back it," he said.

"What we insist on is a national forum where the provinces, the federal government and the university community can talk to each other to develop long-term policies to maximize academic contributions to society."

The creation of a national advisory body has already been endorsed in principle by Mr Regan, the Secretary of State, and the Association of Universities and Colleges of Canada, which represents university vice chancellors. The federation's proposal has been greeted warily by some provinces, however.

Mrs Bette Stephenson, Minister of Education for Ontario, described the proposal as "constructive and welcome" but declined to follow the example of the council of Ontario universities and express clear support.

A letter to the federation from Manitoba's university commission doubted whether many provinces would support creation of national machinery in the midst of a fierce constitutional dispute with the central government.

It continued: "If is not only Quebec which reacts negatively to what some provinces regard as federal intrusion into provincial jurisdictions in education.

"The establishment of a council on research and the universities suggests either both levels of government giving some authority away to such a council or establishing a pressure group or lobby of sorts with respect to post secondary education. We are not sure that this is what our governments, or at least some of them, would want," it says.

Quiet American enters new territory

Peter David continues his series on university teachers in American government

The American public is congratulating itself on having discovered Mr George Shultz. At his confirmation hearings in the Senate last week, the new Secretary of State won almost universal admiration for the simplicity and courtesy of his answers.

The contrast with his predecessor, Mr Alexander Haig, could hardly have been sharper. When Mr Haig faced the senators in similar hearings two years ago he had bristled at every other question. His manner was abrasive and his use of the language – instantly labelled "Haigspeak" by an amused press – stirred uncomfortable memories of the technocratic jargon which was the fingerprint of dirty government during Vietnam and Watergate.

The difference between the two men is in part the difference between a general and a professor. George Shultz's academic career is a Cook's tour of America's shrines of higher learning. An undergraduate at Princeton, he spent nearly a decade at the Massachusetts Institute of Technology. He was dean of Chicago University's graduate school of business and a fellow of the Centre for Advanced Studies in the Behavioural Sciences – the quiet sanctuary in California where some of the world's most talented social scientists are invited to spend a year in quiet reflection. Since 1974 he has been part-time professor of management and public policy at Stanford University.

But Mr Shultz is not just an academic. By interleafing his scholarship with jobs at the highest levels of government and big business, he has joined America's special breed of

George Shultz: "universally admired"

omnicompetent professors who glide effortlessly from graduate seminar to crisis meeting in the situation room at the White House.

Unlike some of his predecessors, notably Henry Kissinger, George Shultz does not appear to leave his senior common room manners behind. As President Nixon's secretary of labour, budget manager and later secretary of the treasury, he earned a reputation as a calm and persuasive conciliator, an analyst rather than an idealist.

The reasons for this reputation are not hard to find. The new Secretary of State's intellectual homeland is in economics and particularly industrial relations – the discipline of conciliation. Some of his earlier research dabbled in the fledgling science of conflict resolution. As secretary of labour he established a harmonious relationship with the trade unions and a personal friendship with George Meany, president of the AFL-CIO, America's version of the TUC.

As treasury secretary he was a moderate who was never entirely captured by the Chicago economists and simple monetarism. As far back as 1969 he warned that the use of monetary instruments to control inflation could result in heavy unemployment among the workers America most wanted to help.

Although he has no formal diplomatic experience, Mr Schultz has been deeply involved in foreign affairs, both through government and as president of Bechtel, a sprawling construction and engineering multinational. Bechtel's business volume exceeded $11,000m last year, and included the construction of nuclear power plants in several countries. The group has invested heavily in Saudi Arabia and lobbied publicly in favour of America's sale of advanced radar aircraft to that country last year. In last week's hearings Mr Shultz dismissed fears that his links with Bechtel would tilt him against Israel, but called for better relations with the Arab world and talks with the Palestinians.

Mr Haig let it be known when he became Secretary of State that he intended to be President Reagan's "vicar" of foreign policy. He resigned because he was not allowed to prevail over other members of the parish – defence secretary Casper Weinberger and security adviser William Clark. George Shultz would prefer to be seen as the dean of American diplomacy and is expected to avoid enervating conflicts with other members of the cabinet. But only time will tell whether this conciliatory professor can come any closer than a pugnacious general to welding together an administration which is still deeply divided on America's foreign policy.

US retains iron will on East West science boycott

The stark realities of the Soviet system made it impossible for the United States to pursue a policy of scientific collaboration which could have benefitted the entire world, President Reagan has told Congress.

In a report on science and diplomacy the president says that scientific collaboration between the superpowers – initiated by President Nixon to combine the strengths of the world's biggest research establishments – will not resume until the Soviet Union changes its foreign policy.

Most United States-Soviet science projects were curtailed by President Carter after the Soviet invasion of Afghanistan. President Reagan froze the remaining agreements to penalize the Soviet Union for its role in the imposition of martial law in Poland.

But in his lateat report President Reagan claims the scientific partnership between the two countries had begun to collapse before the Afghanistan invasion as a result of the disillusionment of American scholars seeking cooperation with their Soviet counterparts.

Many of the best Soviet scientists and institutions are off-limits to foreigners; they work in the vast Soviet military sector, where the Soviet Union has chosen to expend a disproportionate and gropwing share of its national resources," the report says.

"Free exchange of ideas in nonsensitive areas, the norm in the West, is impeded because Soviet scientists face imprisonment for disclosure of unpublished research results."

Other features of science in the Soviet Union criticized by the president include the restrictions on scientists seeking to travel overseas and the curtailment of the careers of scientists who happen to be Jewish.

"The Soviet government has chosen to imprison, exile, or deny work to some of its most distinguished scientists for the crimes of thinking independently or wishing to emigrate. Others are sent to psychiatric hospitals in a flagrant misuse of science in service to the Soviet state."

The president's comments are contained in a report which the executive branch is obliged to give Congress every year on the relationship between science and American foreign policy.

Promise to blacks 'made good'

from our North American Editor

The Reagan administration claimed last week it had made good a promise to give special help to America's traditionally black colleges and universities.

Mr Terrel Bell, the education secretary, announced black institutions would receive a disproportionate share of the money available through a special federal fund designed to help developing colleges.

According to Mr Bell black institutions would receive $35m from the fund – known as Title III – instead of the $24m they received last year. The total size of the programme is expected to be $116m.

The funds are awarded to colleges which want to upgrade their academic programmes or enhance their facilities. Only half the institutions which applied for grants this year were successful, but 70 per cent of the applications from black colleges were accepted.

Mr Bell said the distribution of Title III funds reflected a promise President Reagan made last year to increase the participation of black colleges and universities in federally sponsored programmes.

Black colleges themselves, however, fear their increased share of Title III funds will do little to make up for the big cuts in student aid proposed in the administrations's 1983 budget. Because black colleges traditionally attract poorer students, they suffer disproportionately from cuts in the amount of government money available to needy students through grants and loans.

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Women's groups lose sporting opportunity for investigation

In a major setback for American women's groups, a federal district judge has prevented the government's Education Department from investigating a complaint that a university athletics programme discriminated against women.

Judge Dortch Warriner ruled in favour of the University of Richmond which had challenged the ministry's right to enforce sex equality laws in a university activity which received no direct money from the federal government.

The ruling was the latest in a series of contradictory court decisions on the interpretation of Title IX of the 1972 education amendments. Title IX said nobody could be excluded on the basis of sex from any educational programme receiving federal support.

According to Judge Warriner, the law could not be enforced in the case of Richmond University's athletics programme because, although the university as a whole received federal money, none went directly to athletics.

"The Education Department should not in the future endeavour to investigate, regulate, coerce or intimidate colleges and universities with regard to programmes or activities that do not receive direct federal financial assistance," he said.

The Department of education had argued that athletics at Richmond benefitted indirectly from federal funds provided to the University in the form of library grants and students' financial assistance, and therefore fell under the jurisdiction of Title IX.

In rejecting the department's argument, Judge Warriner followed the example of several district courts in similar cases over the past 18 months. But a Pennsylvania judge last year took a different position over a case brought by Temple University arguing that it would be absurd to limit Title IX only to those parts of a University receiving direct funding.

Women's groups in the United States, particularly the National Advisory Council on Women's Educational Programmes, have argued consistently for a liberal interpretation of the statute which would extend its jurisdiction to every programme within an institution receiving federal money.

In view of the contradictory decisions in lower courts, a definitive interpretation of the law may have to be given by the Supreme Court, which in recent opinions has hinted it favours the narrower definition of Title IX's jurisdiction.

Earlier this year, the Supreme Court settled another long-running dispute about Title IX. In a decision welcomed by women's groups, it ruled the law was intended to protect teachers and other educational employees as well as pupils and students.

Overseas news

The reluctant immigrants

from Craig Charney
JOHANNESBURG

South African universities are having trouble recruiting the lecturers they need from overseas.

Though the situation has eased somewhat in the past year, universities still attract fewer overseas applicants than those in other comparable countries. Political reluctance to teaching in the apartheid republic appears considerable, despite the insistence of the most local academics that foreigners have a contribution to make.

Perhaps 100 lecturers come from overseas each year to teach at South Africa's five predominantly white English-medium universities, representing an estimated quarter of their teacher intake, the Afrikaans universities take few foreigners, except in languages and certain scientific specialities, because so few speak Afrikaans.

The largest number of immigrant scholars comes in the natural sciences, followed by the humanities. Only a trickle of social scientists arrives, because in these fields local supply is larger, hostility among overseas scholars greater, and visa refusals by the authorities more frequent.

Britain is traditionally the source of the greatest proportion of academic newcomers, but more and more are coming from the United States, Australia, and other European countries. Recent years have also seen the return of South African dons and postgraduates from institutions abroad, as establishments were cut.

Though the increase in numbers and quality of local postgraduates has diminished the previously heavy dependence on foreigners of the English-medium universities, it is clear that they have felt the effects of the academic boycott of South Africa.

"There is no doubt that we are suffering from our isolation", says Professor P. D. Tyson, deputy vice chancellor of Johannesburg's University of the Witwatersrand. "We would like to appoint more people from overseas".

He said his institution had particular difficulty finding lecturers in computer science, maths, architecture, and certain branches of engineering. The University of Cape Town has let some posts vacant due to the absence of suitable applicants.

The situation was at its bleakest following the 1976 black uprising, when many feared imminent revolution, Mr B. G. Setterberg head of staffing at the University of Natal, recalls. "The image was, 'if I come, I might have to leave in a hurry". At his university, overseas applications fell from an average of four to twelve per post to under four.

"We were wondering whether it was worth our while to advertise vacancies abroad," says Mr A St Quintin, Rhodes University's deputy personnel officer, as recently as 1979, some of its advertisements overseas were receiving no responses at all.

University recruitment officials here agree, however, that staff cuts at UK universities have eased their position during the past 12 months.

"Clearly, the redundancy factor is having an effect on the situation in the UK," according to Professor A. D. Carr, deputy principal of the University of Cape Town.

"Despite our political situation, which is so unattractive to overseas scholars, they realize they can now take an early retirement and move into a higher post abroad. With the competition for academic posts, it has to be an outstanding scholar to get a chair at a leading UK university, while it is not comparably difficult here."

At Natal, overseas applications have recovered to five or six per post, with one recently-advertised chemistry vacancy drawing 20.

Nevertheless, South African are still conscious that their universities are relatively unattractive. Wits found less interest than it expected when it tried to recruit among lecturers pushed out of UK universities, according to deputy vice chancellor R. N. Charlton.

UCT's Professor Carr reported similar experiences, adding: "we do not get anything like the number of applications you would get for a comparable post at a university in Australia. One must assume it's the unfavourable political climate."

Even if scholars do seek and accept jobs, they sometimes don't arrive. Professor M. J. Hoch of the Wits physics department cites the case of two men who accepted posts there, then withdrew at the last moment, both within the last three months.

Those who have come generally say they do not regret it. Dr David Waters came to UCT five years ago after finding that an Oxford geology DPhil was no guarantee of a British teaching job. He says: "The local environment in Cape Town is marvellous, and the academic environment in this department is very stimulating. I feel much more associated with UCT than with South Africa, and I am pleased that UCT maintains standards I am proud to be associated with."

Salaries at South African universities nowadays are almost comparable to those in Britain. Recently advertised lectureships were on a scale from £6,070 to £11,085. Against a scale of £6,070 to £12,860 for comparable UK posts. Since scholars coming here can usually expect a higher academic position as well as lower living costs, the move usually means a rise in living standards.

But moral questions loom larger than economic ones for many potential recruits to South African universities. Many feel coming would amount to an endorsement of apartheid, and they are urged to stay away by anti-apartheid movements.

Academics at English-medium universities, however, insist there is more to be done by coming than keeping out. They point to their institutions' increasingly successful fight against the laws restricting the admission of black students, and say that foreigners are a leavening influence.

Scientists insist that their research is non-political.

"Unless one looks for sponsorship from the military, there would be no compulsion to be involved in any work of this kind." says Professor Hoch.

While left-wing academics say researchers in strategically important fields should keep out, a number feel a need for overseas colleagues to keep in touch with new trends in their specialities, particularly in the face of government pressure against them.

A supporter of the far right Conservative Party captured the presidency of the Afrikaans Student Bond at its annual congress in Port Elizabeth. Mr Andre Bartlett, a 24-year-old theology student at Pretoria University, was elected to lead the organization, to which student bodies at all but one of South Africa's Afrikaans universities and teachers' colleges are affiliated.

Random students plan their next move in last October's sit-in

Rector who triggered student strike resigns

Professor Michal Hebda whose appointment last October as rector of Radom Engineering College provoked a national student strike, has resigned from his controversial post.

No reason has been given but his appointment set in motion a chain of events which, according to some commentators, triggered the imposition of martial law last December.

According to deputy prime minister Mieczyslaw Rakowski, the last straw was the demand by the new, unofficial Conference of University Rectors that they should have some say in the appointment of the Minister of Science, Higher Education and Technology. The same meeting of rectors, in Poznan on December 8, had expressed its warm support of a six-week long students strike, protesting against Hebda's appointment. The striking students, said the rectors, were defending the academic freedoms promised in the Lodz accords of February 1981.

The Lodz accords had pledged university autonomy and self-government, and student participation in the academic councils of universities and higher colleges. An important clause in the accords was the right of academic councils to elect their own rectors.

At the beginning of the academic year elections for the post of rector took place all over Poland. In only one case – Radom Engineering College, was there any difficulty. Here for no clear reason the Ministry of Science, Higher Education and Technology intervened and imposed its own candidate, Colonel Michal Hebda.

The students of the college immediately started a protest strike, and within two weeks protests had begun in every higher educational institution in Poland, adding the expressions *strajk okupacyjny* (sit-in) and *strajk czynny* (active strike, i.e. teach-in) to the academic vocabulary.

One side effect of the protests was that numerous students took advantage of the temporary stoppage of lectures to go abroad to improve their knowledge of foreign languages. When martial laws was declared, they simply stayed in the West.

The Independent Students' Association, (NZS), established in February 1981 as part of the Lodz settlement was one of the first victims of martial law – it was outlawed at the beginning of January, and a number of its leading activists interned. The new higher education act, long promised as the embodiment of the new liberalitzations was finally passed in May 1982, but now incorporated escape clauses allowing the minister to veto the "autonomous" decisions of the academic councils. This act may still not prove to be the final version – when the Warsaw regional party chief Marian Woźniak met last week with Party activists from Warsaw Technical University, the latter suggested that the act had been introduced too hastily.

Martial law in the universities meant the political "verification" of all staff, as a preliminary to the dismissal of "unreliables." The underground cells of Solidarity, by now firmly established in the universities, called for massive opposition to these screening procedures, and, in Warsaw, conducted a "public opinion survey" on the proper response to "verification".

The replies were overwhelmingly in favour of resistance (93 per cent – of whom 49 per cent said that the resistance should be "passive" only). Almost 70 per cent of respondents said that the best way to oppose "verification" would be to boycott all posts falling vacant as a result of political dismissals.

So far, there have been relatively few changes of personnel for political grounds. Some universities – including Warsaw, Gdansk and the Marie Sklodowska-Curie University of Lublin – have lost their democratically elected rectors. In all cases these changes, although formally attributed to the "resignations" have been met with protest, and, judging from a recent article in the political journal *Perspektywy* by the new rector of Warsaw University, Dr Kazimierz Herzeyński, their replacements have met with considerable hostility.

Government hopes that "verification" could be completed before the end of the vacation, and the necessary replacements made during the vacation have been blocked by the university administrators and heads of department.

By next term, the new higher education act will be in force, and although this gives the minister power to overrule the decisions of the academic councils widespread sackings then would make the much publicized concessions on academic freedom embodied in that act a subject for ridicule.

In the meantime, Polish universities have been attempting to carry out what is, after all, their main function, teaching. This has not been easy under emergency regulations which made the rector of the university solely responsible for law and order on campus, excluded all staff and students from university premises as soon as their teaching/studying duties were over for the day, and eleminated all the new "multi-viewpoint" courses from the curriculum.

The emergency regulations however, have made it difficult to run even the least controversial courses. Duplicating facilities may be used only with the rector's permission. This has considerably hindered the production of such essentials as reading lists, course notes and examination papers, as well as the copying of articles from academic journals.

The last is particularly significant because from 1978 there were annual swingeing cuts in subscriptions, until 1981 when no funds were allotted at all. Photocopying from borrowed journals was the standard way of filling the gap.

Martial law, however, effectively ended this procedure and although small budget has been allotted to journal subscriptions this year, it is barely 20 per cent of the 1978 figure. A few small relief operations have been mounted; but the overall picture remains bleak and, in the words of the Warsaw daily *Życie Warszawy* could well do "irreversible" damage to Polish scholarship.

Students campaign against 'unfair' loans scheme

from Geoff Maslen
MELBOURNE

The Australian Union of Students has launched a nationwide campaign against what it fears to be an imminent Commonwealth government move to introduce a student loans scheme.

According to the AUS, leaked correspondence between the federal treasurer, Mr John Howard, and the Australian bankers' association shows that the government's long-term aim is to abolish the present student support scheme and have loans as the only form of student financing. The AUS claims that the government intends to introduce legislation into Parliament next month to bring the loans scheme into effect.

Tertiary students have been fighting loans proposals since 1975 when a liberal party policy statement promised to investigate the feasibility of a loans scheme. In 1977 a committee of inquiry into student loans came up with a series of recommendations on the introduction and form of a student loan scheme but these have been largely ignored.

In 1981, a commonwealth committee of review proposed introducing student loans but the government and trading banks could not reach agreement on how the scheme might work. The banks argued that a maximum loan of A$2,000 – with a minimum of A$500 in any one year would be reasonable but because of high administrative costs anticipated for such loans, they would have to charge the maximum possible rate of interest – currently around 15 per cent.

Mr Howard, according to correspondence leaked to the AUS, told the banks that a minimum of A$500 was reasonable. But, he said, unless the annual lending was raised considerably, "there would be substantial problems for the government in representing a loans scheme as a substitute for increases in student allowances".

The banks believe that the proposed A$50m scheme could seriously impair their ability to meet demands from the community and they are also concerned by the prospect of a high default rate for which they want the government to assume responsibility. Nevertheless, the banks have accepted the inevitability of the introduction of the scheme and are now awaiting the outcome of the political battle to be waged over the issue.

According to the students' union, the government intends to bring in the loans scheme and then use its introduction to abolish the present student assistance programme. The value of tertiary education allowance has fallen by a third since its introduction in 1974.

In that time the value of the parental means test cut-off point has dropped from 110 per cent of the average wage (in 1974) to its present level of 76 per cent. The AUS says that although the sums involved are totally inadequate, the loss of the student allowance will be a hard blow for those students relying on it, and for many it will mean the end of tertiary study altogether.

Private college to go ahead

from James Hutchinson
BONN

The government of North-Rhine Westphalia has finally decided to permit the foundation – at Herdecke in the Ruhr – of West Germany's first private university. It is expected that the first 20 students will be enrolled this year, and that after 10 years Herdecke will have created its full proposed capacity of 3,000 places.

Already nearly 3,000 applications have been received for places in the medical faculty, and some 800 to take other subjects, faithfully the founders have about DM 1.5m (£350,000) available, mainly from voluntary contributions, and they estimate this sum will see the university through the first five years. Thereafter, an income of about DM 5m (£1.16m a year will be needed.

The university will be housed in the Herdecke Community Hospital, which was founded in 1969 and is run according to the ideas of Rudolf Steiner, the Austrian philosopher and scientist who formulated the philosophic theory known as "anthroposophy." Space for the university is also available in a school building and a former community centre.

Herdecke will be different from state-run universities in many ways. Admission to the medical faculty, will require not only a good *Abitur* result, but also practical experience of caring for the sick. Teachers and students will discuss scientific controversies and research results, medical students will be taught not only medicine, but also two languages, as well as history and sociology.

One year later . . . the response

Last July, in unprecedented fashion, the University Grants Committee gave all universities specific advice on where to increase or decrease student numbers, and which courses to close. One year on, we look at how they responded. NGAIO CREQUER reports, with help from OLGA WOJTAS and FELICITY JONES.

ASTON

As recommended, has substantially reduced intake to social studies (1981 onwards), discontinued philosophy (a combined honours option) and Russian. Biological sciences is being reduced but not discontinued. As asked, has reduced intake to engineering, mathematics and pharmacy "but due to financial pressure this is true of almost every course."

Increased numbers in physical sciences were recommended but a spokesman comments "due to the severe financial cut imposed we have been unable to increase student numbers in any subject area."

Is on course to meet student targets but drastic action was necessary. The admissions procedure was suspended in May 1981 and certain courses were closed for October 1981 entry, with alternatives given to students who had received offers.

Aston is aiming for 350 academic staff by 1983/84. So far there are 31 known departures between then and now which would leave another 51 posts to eliminate.

BATH

Is following UGC recommendations to maintain numbers in arts and languages and make a small increase in business and management studies. It will make a major increase in mathematical science specialists and decrease in physics.

Is on target with student figures for 1983–84 and 1984–85. Was already ten posts below establishment of 350, necessary cuts have been made by freezing these posts.

BIRMINGHAM

UGC views were main consideration in formulation of academic plan, approved last December which proposed following reductions in academic posts: education, 5; medicine and dentistry, 28; engineering/technology, 18; biological sciences 11; mathematics/computer science, 2; physical sciences, 20; social sciences, 26; other prof./vocational, 1; and languages and other arts, 29.

This makes a total of 140, to be achieved by 1984. Since then a reduction of 23 has been achieved and discussions continue. There would be a reduction of 137 support posts.

West African studies, and Russian and East European studies, which the UGC wanted maintained, were subject to same scrutiny as other academic departments. Although not guaranteed total immunity, they would not suffer similar losses as other languages.

Mathematics and physical sciences will increase numbers, as advised. But physics, which the UGC specially supported, was proposed to take a greater than average cut in academic (10 posts) and support staff (17) because of the department's high costs. The plan accepted that this might seriously weaken its research base.

Large cuts in medicine will also have serious effects on teaching and research, and on clinical services rendered to the National Health Service. General dismay at cuts in engineering/technology and reconsiders what the large loss of technical staff (39) will be damaging and weaken the research base.

Overall the university believes it is on course for its target numbers.

BRADFORD

Senate document submitted to UGC proposed phasing out 11 subject: biological sciences; materials science and technology; textile science and textile technology; colour chemistry; literature and the history of ideas; pharmacology; science and society; social analysis; social policy and administration; research in education; and medical sciences. In effect it is the phasing out of ten subjects because pharmacology and medical sciences, plus other contributions, could form a new degree, biomedical sciences.

It agreed to keep at full strength chemical engineering, control engineering, civil engineering, electrical and electronic engineering, mechanical engineering, technological management, industrial technology, the management centre, the modern languages centre, European studies and interdisciplinary human studies. The UGC has increased the quota of engineers by 50. The remaining subjects will all suffer a large reduction in student intake.

Since most courses last four years the target will be reached in 1984/5.

Precise figures for staff loss have not been drawn up, but internal figures of jobs needed to be saved are 125 academic, 33 academic related and 240 non-academic. People who have gone or signified their intention to go are, respectively, 60, 22 and 203.

Professor John West, vice chancellor said: "This three year period of run-down is producing a great deal of strain and, with the best will in the world, it is still affecting the students."

BRISTOL

As recommended, is planning a decrease in numbers in arts and social studies. Intends to reduce department of history of art (suggestion was to discontinue) but not to stop service teaching in art history. As recommended will maintain numbers in social work.

Follows UGC advice in planning a slight increase in physical science and a decrease in specialists in mathematical science. Has discussed with Bath possible *cooperation in architecture but it appears this would not be feasible.*

After a special court meeting it was agreed to set up an inquiry into architecture, following university and city concern. Education has received a big cut but escaped an earlier proposal to close.

On course to meet the student targets recommended by 1984/5. Present plans indicate it will need to shed 122 academic staff in teaching departments by the end of the academic year 1983/84. Of these, 90 have already gone or have signified their intention of going.

BRUNEL

As advised, Russian courses will be phased out although there will be a minor amount of service teaching. PGCE courses will be retained in design technology and mathematics. There will be a new undergraduate course in engineering design, an increase in the design technology course (with a bigger engineering element) and the university is considering going into information sciences.

Mathematics, physics and chemistry have been cut slightly. The UGC recommended a substantial reduction in biological sciences but subsequently admitted it had made mistakes. Brunel, accordingly has spread its cuts evenly across science.

The UGC recommended a single site campus but Brunel is still arguing for a split site. Academic strategy called for shedding of 53 academic posts and 70 non-academic posts. This has been achieved voluntarily as has a saving of £500,000 per annum. Claims to have become the first university to have adjusted to its loss of UGC income.

CAMBRIDGE

No special action was required in specific areas. Well on course to meet target numbers recommended for 1983–4. The colleges have now agreed a programme which should ensure that the university target is met.

Precise estimates on academic posts needed to be shed are difficult, because of wage settlements and compensation for employer's pension contributions. Number of academics who have already taken early retirement, more than 70 already, will provide sufficient elbow room to prevent redundancy.

CITY

Has responded by broadly reducing and increasing student numbers as advised (substantially reduce social studies, reduce mathematical sciences and increase physical sciences).

Is reasonably in line with meeting target for 1984/5 from 1980/81 baseline. Expects reduction of 60 academic staff, of whom some 45 will have left full time employment this year.

DURHAM

Has produced model of future student numbers broadly in line with UGC advice. Awaits advice on numbers on PGCE, BEd and other courses in education, and has produced a "best guess" figure in the meantime. If incorrect it will need to amend the non-science part of the model. Subject to the above, is on course to meet the targets for 1984/5.

Relatively few staff have taken early retirement and some vacancies have been left unfilled until the university gets into academic balance. But some vacancies have been filled and four new posts have been established. University expects to have about 35 fewer academic posts than it had in the estimates for 1981/82.

EAST ANGLIA

UGC advised discontinuing linguistics and drama but university found they were taught effectively, and at low cost, as well as being an integral part of the school of English and American studies. They will continue.

Has broadly followed UGC advice by expecting more severe cuts of the arts and social sciences, than sciences. (Chemistry for example suffers a 6.8 per cent spending cut compared to 12.8 per cent for social science). Biological science gets a 10.1 cut in money.

Russian will be phased out as single honours subject. Generally, on course on student numbers. The plan approved so far relates to finance and student numbers so it is too early to be definite about staff losses. So far council has approved seven cases of PRCS. University estimates that some 40 posts may have to be shed.

ESSEX

In line with UGC recommendations, has increased numbers in science, engineering and mathematics but has not achieved drop in arts and social studies. Admissions policies and target figures for coming year to 1984 in all subjects in line with recommendations.

Following clarification with UGC (which said phase out biological sciences), has reaffirmed commitment to continuation and growth in teaching and research of biology. Unable to give firm answers on how many staff may have to be shed but says hopes to achieve losses voluntarily.

EXETER

Working towards UGC numbers for science and arts, which were similar to its own plans. Drama still being debated but there is no intention of discontinuing it.

Of some 500 academic staff it is estimated it must shed the equivalent of 80 posts. So far there have been about a dozen early retirements this year, and another dozen junior temporary posts have been discontinued.

HULL

After careful consideration and "exchange of views" with UGC arts sub committee, has decided not to discontinue drama and history of art, as recommended. Other advice from UGC accepted except that the preliminary review of departmental organization with aim of combining physics and applied physics has suggested no real financial benefit, rather a number of significant academic disadvantages.

Cannot define how many posts will be shed. Up to September, 1982, 74 academic and related posts have been suppressed after falling vacant.

KEELE

Senate has decided to keep Russian studies, despite UGC recommendation to discontinue it and an intransigence "close to bullying in the unwillingness to remove the threat of further financial penalty unless its advice is followed" according to vice chancellor, David Harrison. It will now be treated just like any other department in discussions on future shape.

UGC wanted single honours in some subjects to go, appearing not to understand that it was only an option for a few final year students. It will continue.

UGC wanted consultation on possible phasing out of four year courses. Keele Foundation Year, taken by 40 per cent of students, will continue but numbers will reflect smaller entry.

In new "steady state" four year course entry will be 300 a year and three course entry about 400 a year. Reasonably on course to meet its target.

Has already lost some 20 per cent of non-academic staff and same percentage of academic-related will have left by this month. Thirty academics plan to take voluntary redundancy between now and 1984, probably less than half number required to meet cut.

KENT

Is adjusting student population to meet UGC advice. History of art will not be offered as a single honours degree but will remain as a minor subject. No intention of discontinuing drama.

Estimates it needs to lose 40 academic staff from its 1979/80 establishment, under a voluntary policy. Vice chancellor will be interviewing all academic staff. Approximately half the number required have gone, or said they will be going.

LANCASTER

Senate has decided it wishes to retain theatre studies and archaeology, but has agreed that Russian studies should be phased out. Transfer of staff in European studies has taken place, and transfer of staff in Central and South-Eastern European Studies to Oxford is being settled. Arabic and Islamic Studies will be phased out.

On course to meet the student targets

Increases and decreases as Scotland bravely leads the way

ABERDEEN

Italian is to be retained, contrary to the UGC's advice, and the university may strengthen Scandinavian studies. The UGC's heavily cut student intake, but Aberdeen has already suffered more than half its 25 per cent cut in grant last session. The university court was the first to seek compulsory redundancies in April saying 57 academic posts had to be axed. But this was vetoed by the senate, and the local Association of University Teachers threatened industrial action and to withhold final examination marks. The decision on redundancies has now been postponed until December. Aberdeen hopes to shed 160 posts by 1984/85 and is 25 short.

EDINBURGH

The university has implemented almost all the UGC's advice, and expects to meet student intake targets, maintain science numbers, cut arts by 8 per cent, law by 10 per cent, social studies by almost 20 per cent, and slightly increase the medical intake.

Edinburgh does not envisage integrating chemical engineering with Heriot-Watt, despite recommendation. It is increasing numbers in business and management studies, physical and mathematical sciences, and engineering and technology. Cuts are being made in agriculture and architecture and planning.

The university refuses to give a total number of posts to be shed, but by October it will have lost 120 academic posts, including 23 chairs.

DUNDEE

Dundee, as advised, has not launched a unique course in medical laboratory sciences. Its restructuring committee has also recommended axing the department of medical biophysics, with the loss of four staff, who may be redeployed. Around 75 academics are taking early retirement and voluntary severance. Another 40 academics will consider in October whether further job losses are necessary.

Dundee has a major problem with its medical faculty which has to make a 14 per cent cut although the premature retirement compensation scheme does not apply to clinical staff. The Scottish Secretary has agreed to provide funds to cover gaps in health care caused by the cuts, and Dundee hopes to gain eight posts.

The university is on target with student numbers, maintaining them at 1979 levels, and as recommended will increase numbers in physical, mathematical and biological sciences.

GLASGOW

The university has not yet made any move to axe linguistics, as recommended by the UGC. This will be considered fully next session, when each faculty will produce a restructuring plan.

Glasgow is on target with its cuts in student intake of around 200 from 9,000. Arts and social science intakes have been reduced over two years from 1,150 to 1,000.

The university's financial prospects have improved dramatically, according to Principal Dr Alwyn Williams, with 211 academic staff leaving by 1984-85.

HERIOT-WATT

The UGC recommended last July that Heriot-Watt axe Russian, but reversed its stance during their visitation last month, with additional funding for 30 students. Heriot-Watt is dropping its degree course in business law as recommended and after further discussion with the UGC it will phase out government and modern history. Discussions have been inconclusive between Edinburgh and Heriot-Watt on increased collaboration in social studies and chemical engineering.

The university is virtually on target with its student cut by 1984/85 of 4 per cent in science and 36 per cent in arts. As recommended, it has cut numbers in pharmacy by 25 per cent. Right academics are taking early retirement or voluntary severance.

ST ANDREWS

The university is to axe archaeology and linguistics, with a loss of seven staff, some of whom it hopes to redeploy. It has decided not to axe music, although it is no longer possible to take single honours. Medical biology has been discontinued in name although its constituent classes are still available in the science faculty.

The university is not yet on course to reduce its intake by 400 by 1984–85. St Andrews plans to admit 1,000 overseas students, bringing its student total to 4,000. Fifty academic posts must be shed by session 1983/4, and so far 33 academics have agreed to go. Its major problem is finding the staff reductions without redundancies, as its young age structure has ruled out early retirement.

STIRLING

The July letter advised Stirling to axe music, which the university found difficult to understand as it had only two staff offering a highly cost-effective combined course, it emerged, according to the principal, Sir Kenneth Alexander, that the UGC arts sub-committee "assumed music was expensive and they were trying to be helpful". They subsequently withdrew the advice.

Stirling has reduced student numbers in the sciences as advised. The UGC recommended physical sciences should be protected and allowed Stirling an extra 40 places.

Stirling was invited to explore cooperation with Dundee in physical sciences but has suggested to the UGC the possibility of students spending a year in the United States. Stirling hopes to be on target with its 37 per cent cut in student intake

Stirling must shed 60 staff but cannot solve its problems by early retirement since only nine staff are eligible. Around 20 posts have been lost and redeployment is being discussed with the UGC which has agreed to meet some retraining costs for lecturers in business and film and media studies.

STRATHCLYDE

The university recently gained permission from the UGC for the largest increase in student intake with 100 places in engineering science. Intake is on target, cut over two years from 1,900 to 1,550 with a larger cut in arts and natural sciences to allow considerable expansion in engineering and business studies.

No departments have been axed, but Strathclyde has embarked on a series of departmental mergers. Last year four biological science departments merged, and next session electrical engineering and electronic science will merge. The university must lose 120 academic posts, and has almost reached this total, with many staff re-employed part time.

Strathclyde's principal, Dr Graham Hills, has criticized the UGC for attempting "to arrange universities on a linear scale of traditional values which has necessarily throttled innovation. Unless something is done to revitalize the quality and quantity of education in the newer disciplines, our economy will suffer further."

to the UGC cuts

recommended for 1984/85. Has been freezing appointments since 1979. By July, 1981 26 had been frozen. Further 23 members will have left by September, 1983. Further reductions will be necessary by that date but estimates are difficult.

LEEDS

Recommended is demise of department of archaeology, though there will be some service teaching. Drama will be reassigned with school of English. There will be some self-financed drama teaching.

Discussions with Bradford continue on possible collaboration in social studies. Is on course to meet UGC targets. More than 100 academics and 50 non-academics will be taking early retirement. Necessary economies and reshaping will be achieved by voluntary means.

LEICESTER

Was advised to consider discontinuing music and religion. In religion is reducing undergraduate courses to first two years of combined arts degree courses, and to supplementary courses in the first two years of single subject courses.

Will continue three year musicianship degree, but with annual intake of eight students. This was because of special characteristics and importance of maintaining place that music making has in life of university. Position will be reviewed in mid-1980s.

UGC advised a significant increase in engineering. Increase in undergraduates will be accompanied by structural changes to courses to provide increased specialization without diminishing emphasis on engineering sciences.

Estimates for 1982–3 show university is on course with plan. Aim is to achieve reductions by voluntary redundancies. Normal retirements in 1981–2 include 12 academic and two academic-related. Voluntary redundancies at September, 1982 took 23 academic and academic-related. In 1982/83 there will be four retirements and 28 voluntary redundancies.

LIVERPOOL

Italian and linguistics will lose their departmental status but service teaching will continue. Hopes that formulation of economics and business studies meets spirit of UGC advice about business and management studies (concerned about its long-term viability).

Has accepted specific advice about particular academic areas and working towards its implementation. On course to meet student targets recommended for 1983–4.

Under academic strategy 143 academic staff will need to be shed. So far about 80 are expected to retire and it is hoped to make up the rest by natural wastage over the next two or three years.

LOUGHBOROUGH

Intends to conform fully to UGC advice (increase physical sciences, engineering and mathematical sciences, concentrate on human biology, decrease arts and social studies). In general lower student target numbers are being achieved where recommended. In some subjects, particularly science and engineering, 1983 targets have already been achieved.

UGC's adoption of 1979–80 baseline, as opposed to 1980–81, has pre-empted most opportunities for expansion.

About half of the 30 academic staff losses have been or are shortly to be achieved through early and normal retirement. Expectations are that objectives will be reached, but perhaps a little later than expected.

Anticipated shortfall in overseas students is causing considerable concern.

MANCHESTER

Broadly following the pattern recommended by UGC. Is also having talks with Liverpool on town and country planning, and urban and regional studies. Is on course with target numbers.

In all, some 600 job losses are required, ideally by autumn 1983. Of these 130 will be academic and related staff who have elected to take early retirement. Known savings include £2m on the moratorium on filling posts, £500,000 on natural wastage and £1,700,000 on retirements.

NEWCASTLE

Russian, a minor programme has been discontinued. Music has not and will be treated the same way as any other department. Has been discussing with Durham possible increased cooperation in psychology and sociology.

Has been trying for some time to increase numbers in physical sciences and mathematical sciences and they are beginning to climb. Biological sciences has been cut back. Pointed out that architecture (significant decrease) was already small so only a small reduction will be made, which the UGC has accepted.

Student recruitment is in line with targets. About 30 staff will have gone under early retirement by September, and more by natural wastage. It is estimated that economies will result in a total staff fall (all categories) of 125.

NOTTINGHAM

Following UGC advice including decrease in social studies, mathematical sciences and pharmacy, maintaining law and an increase in physical sciences. Discussions taking place with polytechnic on collaboration in planning studies, but not a lot of progress has been made.

Greater than average reduction in funding for clinical medicine causing most problems. Higher savings will be difficult to achieve, particularly because NHS region is not well off. On course to meet targets although there might be some last-minute trimming of October 1983 intake.

Under targetted savings by the end of July, 1983, there is a planned reduction of 80 academic staff and 20 academic related. So far, known resignations/retirements etc amount to between 76–80.

A spokesman said: "Vacancies have fallen almost entirely at random and disguise the unevenness between departments. In the next phase we hope that the rate of resignation will continue and we will be able to do real restructuring and start to put posts back where we really need them."

OXFORD

Has accepted UGC advice to discontinue undergraduate teaching in agriculture and forestry. Has drawn up planning assumptions in terms of reductions (for the most part) in staff and student numbers for each of the 16 faculties, and discussion with faculty boards will continue into next year.

Is trying to meet UGC targets although as the vice chancellor says: "It involves the introduction of some unaccustomed restraints on the freedom of colleges to admit undergraduates, and this is of course a rather sensitive and delicate area."

Vacancies are being suspended and there will need to be 200 in hand before they can start refilling any but the most urgent and exceptional. There are 90 on hand, 30 of which have arisen because of early retirement. In the long term the university needs to reduce academic staff establishment by 100.

READING

The honours degree in Russian has been withdrawn, as advised. The university is on course to meet target figures. It expects to have to shed about 100 academic staff and about 40 have come forward.

SALFORD

Has made substantial reductions in students in arts and social studies, and continued English and European languages as recommended.

UGC suggested it discontinued other arts subjects, except as service, and has constructed a new inter-disciplinary degree involving politics, sociology, history, economics, geography, anthropology, English and some European languages.

Has protected economics and geography, as suggested, and business and management, which was not. UGC proposed transferring music to University of Manchester. Manchester did not want it so department will be phased out. So too will the department of visual and applied arts. Salford has reduced numbers in biological sciences and physical sciences and engineering as recommended.

In a significant departure from UGC advice, which recommended a student target of 2,750 students by 1984–5, the Salford plan is based on 3,000 students and is on target.

More than 30 separate courses have been discontinued and about 20 course options have gone. Expects to reduce physical size by one third.

Under plan 151 academic staff will go, along with 93 technical and 32 clerical. Up to end of June, 64 academic staff had gone. All staff over 50 have been asked if they want to retire. Some departments must lose 40 per cent of academics by next July. The UGC has given Salford an extra year to spread the cuts.

SHEFFIELD

Rather than discontinue Russian, is to retain teaching of Russian and Slavonic studies within school of modern languages, but on limited basis, offering dual degrees with other schools, but ceasing single honours.

Business and management to be expanded, and Japanese studies protected, as proposed.

Increase in mathematical sciences has already been met, it is proposed that physics is protected (recommended substantial increase) though there is concern about the subject's high costs, and the wish is to implement the UGC recommendations in engineering (increase) although the total size of the faculty is reduced because of the decline in overseas students.

Discussing with Manchester possible collaboration in landscape design. Other areas, not mentioned by the UGC, include proposals to merge departments of Greek and Latin, to become Classics, possibly also with ancient history and classical archaeology, and a review of relationships between the departments of biochemistry, microbiology, genetics, zoology and botany.

Has been asked to continue movement of student numbers from arts to science based subjects. Is aiming to meet overall targets although in some areas this will not be achieved by 1983–4. Savings on academic and related staff of around 110 posts by September, 1984 are being sought, although several departments have commented on the difficulty of achieving this.

SOUTHAMPTON

Had already decided to close theology, but did not accept advice to discontinue classics and Hellenic and Roman studies. Will reorganize arts faculty into schools to reduce classical languages and civilizations.

The UGC recommended increases in biological and physical sciences. But the university cannot accommodate these within the ceiling for science numbers.

It was agreed to maintain numbers in mathematical studies, with more emphasis on computer science. The UGC's proposal for a 12 per cent expansion in engineering will lead to bigger numbers on four year courses.

The UGC has allowed 30 more science-based students, meaning no overall reduction in numbers on 1979–80 figures, but a shift from arts to science.

Total full-time teaching and research staff will go from 662 in 1980–81 to 602 in 1983–4, and academic-related staff from 247 to 210.

SURREY

Undergraduate philosophy, joint degree in philosophy, psychology and sociology, the degree in human biology and chemical physics, and degrees combining science or technology with foreign languages or business economics have been discontinued. Home economics has also been discontinued after failed attempt to persuade UGC to provide additional resources.

On course to meet student numbers recommended for 1984/85 but many courses will be operating at well below optimum. Professor O. Pick, pro vice chancellor comments: "We could do more than we are allowed to do if we were given the opportunity to utilize the physical resources currently at our disposal and in our view the arbitrary restrictions on student intakes represent a sad waste at a time when the community needs more, not fewer, qualified graduates."

More than 60 academic staff will have to be shed by 1983/84 and so far about half have firmly signified their intention to leave in 1982.

"Natural wastage is largely uncontrolled and this leads to further distortions – a consequence of the crisis which the UGC does not appear to have taken into account."

SUSSEX

Russian Studies will no longer be taught at undergraduate level but will be continued as part of courses. Postgraduates will still be admitted to research programmes. The same applies to classics and medieval studies and religious studies.

Merger talks continue

ABERYSTWYTH

Talks continuing within University of Wales on some subjects mentioned by UGC. In sociology it has been decided to close department but retain *teaching up to joint honours.*

In mathematics, UGC proposed transfer of statistics and computing science from Bangor to Aberystwyth, and applied maths from Aberystwyth to Bangor. Now accepted by UGC that the advice was based on a misunderstanding concerning teaching of statistics and computer science at Bangor.

In agricultural science the college has reaffirmed existing agreement with Bangor which avoids overlap and meets recommendation on cooperation.

On course on targets. Academic plan provides for a net loss of 51 full-time equivalent academic posts by 1984 and discussions are continuing.

BANGOR

Has followed the UGC advice to cut numbers in arts and social studies. Has gone along with recommendation to increase strength in marine sciences, decrease agriculture and increase student numbers in physical sciences.

Plans to be on course with student numbers by 1984–5. Earlier reductions may not be possible because of courses which have special commitments, like the year on a farm spent by agriculture students. Agreed that university will shed 66 academic and academically-related staff through retirement by 1984.

University College, Cardiff

Has taken the advice "in very respect seriously" and is on course to meet targets. In metallurgy it has restructured the department. Merger negotiations with UWIST are dominating thinking.

Unable to give figures for numbers of academic jobs to be shed but said that there was a lot of interest in early retirement, which was expected to grow next year.

ST DAVID'S, LAMPETER

Hopes to concentrate on Scandinavian languages. It also hopes to take two members of staff in religious studies from the Aberystwyth department which is being discontinued.

Anticipates being slightly over the student target recommended for 1983–84 but should be well on target by 1984–85. Does not intend to make any staff redundant. As a result of retirements the academic staff will go from nine professors plus 52 staff in 1980–81, to six professors plus 55 in 84–85 and to four professors plus 55 in 1989-90.

It has been accepted that English, history, geography and possibly philosophy should not expand, and that any department which falls below three staff should be completely reviewed.

Mr A. M. S. Kenwright, the academic registrar, said: "We are very concerned at the weakening of the professoriate in the college and at the accident of the distribution of staff between subjects. This inevitably will mean that certain areas within the college will suffer disproportionately. However this is the price which we have to pay for not making staff redundant."

University of Wales Institute of Science and Technology

UWIST and University College, Cardiff, have decided to merge and create a new university institution. Planning committees from both universities are now examining in great detail every aspect of the merger, and the UGC is closely involved.

The colleges have insisted that integration should not be an excuse for redundancy.

As a result of cuts and loss of overseas students UWIST needs to shed 65 academic and related staff, which it expects to be able to do without redundancy. Needs to reduce non-academic staff by 20. On course to meet student targets.

University College, Swansea

Regarded July letter and subsequent UGC letters on finances as contraproint for planning and is on course to meet student targets up to 1984/5.

Sufficient staff of all grades have said they will take early retirement, plus frozen posts, resignations and non-staff savings enable "this college with difficulty, to expect that it will remain within the financial parameters set for us by the UGC." (Aneurin Davies, registrar).

London presses ahead with fewer sites

The whole thrust of London's thinking has been for fewer sites. Senate has accepted a plan to concentrate physical sciences and biological sciences on five sites: Imperial, King's, Queen Mary, Royal Holloway and University College. Engineering should also be focused on four sites. In the arts, small departments are under scrutiny.

In languages a review committee has suggested reductions in the number of departments, except for English and French. Further central institutes have been proposed for languages. A joint planning committee suggested concentrating undergraduate classics on four sites.

In social studies no recommendations have been made but a review committee warned against proliferation of courses and called for a look at both university and polytechnic provision.

The university is particularly worried about research and some recurrent grant money will be kept back for this. Has been negotiating with the UGC on grant allocation and student numbers. Proposals within the university on court's provisional numbers model would increase the UGC 1983–84 targets by 618 in science and 388 in arts, diminishing the reduction between 1979–80 and 1983–84 to 584. These proposals formed the basis of the London request for higher targets, especially in science, or failing that, specific increases in particular disciplines. Wants longer to reach the targets.

The negotiations may delay university decisions on how to allocate grant to schools until the next academic year. Schools have been warned that allocation will be much more selective than in the past.

Meanwhile, London has gone in for mergers. Bedford and Royal Holloway college have agreed to merge, selling up the Regent's Park site for expansion at Egham. King's and Queen Elizabeth college have agreed to "re-unification" and Chelsea stands on the touchline hoping to join at a later date. Brunel has expressed interest in Royal Holloway. Westfield College has agreed to provide a clearing house for London's overseas students.

Under PRCS 50 professors and 29 readers have left.

Les Etrangers

Throughout history certain "outsiders" have been able to grasp the essentials of a nation's history and culture more completely than a native. Krishan Kumar looks at some strking examples

It has often been remarked how certain "outsiders" in English society have been able to grasp the essentials of its history and culture more completely than any native blithely following the *mos maiorum*. The best example of this is probably Benjamin Disraeli, both in his early "young England" phase when he offered a full-scale philosophy of aristocratic and monarchical rule, and in his more mature period as leader of the Tory party where he showed an unparalleled understanding of the psychology of the working class. No British statesman before or since seems to have so thoroughly penetrated English society in his understanding of it. At the same time it is well known how very "unEnglish" Disraeli remained, how aware of his Jewish origins and the slights he had suffered, how constantly active in manipulating both himself and those around him in presenting the image of the English country gentleman. In a real sense Disraeli remained outside the system he did so much to illuminate and, some would say, save. He could never play a full part in what he so powerfully strove to promote – a "Tory democracy" headed by a regenerated aristocracy – but he could never have had such a vision had he been a "natural" member of the English upper class.

A related example would be that of Lewis Namier, the English historian of Polish-Jewish origin. Namier – working mainly from the New York Public Library – came to understand the workings of the English political system more profoundly than anyone before him. He did it as much by an act of imaginative identification with the political grandees of the eighteenth century as by his systematic use of the documents. He deposited a body of historical scholarships, and a historical method, which historians are still busily turning over and applying to the study of British politics. And yet his "outsider" position in English society was repeatedly brought home to him – as when he was denied a fellowship at All Souls' on account of his race, or in the differences in his experience of conditions during the war from that of his non-Jewish countrymen. *Namier clearly admired the English*

political system, and saw that it had been responsible for a unique degree of political freedom. But his insights into its working were purchased at the cost of being denied full inclusion and acceptance in the profession and the society in which he lived and worked.

The men who developed the most complete analysis of the new industrial society of the nineteenth century in Europe were not, as might have been expected, the English, living as they did in the first and most developed industrial society of the day. It was the prophets of the industrially *least* developed parts of Europe – Saint Simon in early nineteenth century France, Marx from backward Germany – who presented the anatomy and the destiny of a form of society which they themselves had scarcely experienced as yet. Similarly, it was not some member of the bumbling or even of the middle classes, who most acutely analysed the phenomenon of mass democracy and charted its relentless advance. It was Count Alexis de Tocqueville, member of an ancient aristocratic family, a man whose temperament and background alike made him dislike and fear democracy, who calmly announced the extinction of his own order, and who entered into the aspirations and prejudices of a mass society with an insight that still seems uncanny. (One might compare this, incidentally, with the passionate defence of the aristocratic principle mounted by the commoner Edmund Burke.) *In all these cases the thinkers had some experience and some* direct knowledge of the things they described. Tocqueville visited America, Marx came to England. This was a necessary part of the understanding. But the power of their visions seems to derive predominantly from the fact of their exclusion, their marginality to the processes which they described with a sort of horrified fascination. They are the visions of men who are in a system but not of it.

It is one of the most misleading tenets of conventional morality that, outbound practice what you preach. Anything else is dismissed as hypocrisy. Given the predicament and bemoaned the consequences: *Video meliora, proboque deteriora sequor* (I see the good and approve it, but I cleave to the bad). Seeing the good is of course often a consequence of its opposite – following the bad – particularly in religious and political conversion; and here the psychological aspect meets the wider, political sphere. Again and again we have had the apparently anomalous spectacle of conservative, right-wing or downright reactionary statesmen doing the work of the progressive liberal or left-wing parties. These are not, renegade conservatives. They have not abandoned their principles. They usually loathe whatever measures they are responsible for carrying out, together with the allies they are forced to work with. Their motives range anywhere between a sense of clear national duty, through a strategy of class or party advantage, to sheer personal careerism. But the important point is that they do things, often necessary, and far-reaching things, which in the circumstances of the time the "natural" party of reform is incapable of doing.

Take for instance early nineteenth century England, hotbed of radicalism. When in the 1820s and 1830s both Catholic emancipation and the first Reform Bill were dangerously

Alexis de Tocqueville: announced the extinction of his order

Lewis Namier: was denied fellowship at All Souls'

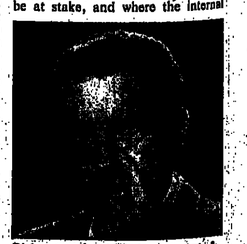
held up by the entrenched opposition of the peers, it was the ultra-conservative Duke of Wellington who grimly forced them down the throats of the noble lords and so perhaps staved off revolution. The peers would never take the measures from the Whigs and Radicals, but they did, just, from the impeccably conservative 'Iron Duke'. The conservative German Chancellor Bismarck performed a similar act of force-feeding on the recalcitrant Prussian Junker aristocracy in the latter half of the nineteenth century. More farsighted than his fellow Junkers, he gave the German people universal suffrage and the welfare state, thus stealing the socialists' thunder while ensuring that the Junkers remained in the saddle tight up to Germany's defeat in the First World War.

Disraeli remained outside the system that he did so much to illuminate and save

The Tories went on to give themselves a vastly extended lease of life through the most un-Tory of manoeuvres

At about the same time Disraeli was making his famous "leap in the dark" and introducing England to mass democracy. To the consternation of his own Tory party, he proposed household suffrage at a time when the liberals were still only cautiously tinkering with the idea, and so forced them to carry through the more radical scheme. A measure that on past showing might have been expected to encounter stiff resistance from the Tory benches went through absurdly easily once the Tory leadership itself had taken the radical initiative. Like the Junkers the Tories went on to give themselves a vastly extended lease of life by this most un-Tory of manoeuvres.

The principle has continued to work with unabated vigour in this century. Just to take the period since the war: we can find at least five good examples. There was the astonishing rapidity with which, under Harold Macmillan's Conservative administration, Britain divested itself in less than a decade of the bulk of its empire in Africa, the West Indies, the Middle East, and South East Asia. There were ugly episodes enough in this process, but not much to compare with the horrors of French decolonialization in Algeria and Indo-China, or the Belgian de-



Richard Nixon: took America out of Vietnam

bacle in the Congo, or the ferociously fought colonial war in Portuguese Angola and Mozambique. How much did this have to do with the fact that the "winds of change" blew from a conservative quarter, such that the bitter internal enmities which soured the same process in other countries were relatively absent in Britain? Some indication that this was a significant factor is suggested by the experience of the French, who were able to extricate themselves from Algeria only under the leadership of General de Gaulle: an irreproachable patriot, a man who was indeed brought in on the shoulders of the *pieds noirs* to save the Algerian connexion and who used his national reputation, especially with the army, to suppress the colonels' rebellion.

A colonial war of another kind provides a third example: Vietnam. All the mystique associated with the Kennedy name cannot disguise the fact that it was Jack Kennedy who committed America firmly to the Vietnam war. It was his successor Johnson, also a Democrat, who pushed the country even further in and it was Richard Nixon, arch Republican and conservative, who finally got America out. It was the same Richard Nixon who pulled off the astonishing feat of making friends with the Chinese Communists, thus allowing the Americans quietly to remove the millstone of nationalist China that had hung around their necks for over 20 years. Israel offers another example equally striking. After all the "doves" had done their best, it was the uncompromisingly hawkish Menachem Begin who was able to bring off the historic pact with Sadat, and give Israel for the first time in its history an ally in the Middle East. Such an act from any other quarter might easily have been denounced as betrayal, if not actual treason. Finally, to come home, there is Mrs Thatcher, Lord Carrington, and Rhodesia. Who would have thought, from the militant pronouncements of the Conservatives in opposition, that within a year of taking office they would be bypassing the Smith-Muzorewa regime, negotiating with the Patriotic Front and offering black majority rule with virtually no guaranteed protection for the whites? One can imagine the howls of rage from the shires if a Labour government had proposed such a thing. And yet the favourable terms actually offered by the Wilson government, which Smith contemptuously rejected, were withdrawn by the Conservatives, along with any favour to Smith himself. What remains must be cold comfort for the whites. The remarkable thing is the extent to which British public opinion has gone along with this. There have been almost no signs of a tribal revolt on the basis of the kith and kin sentiment. No more impressive example could be given of the power of the establishment party to break the taboos and long-cherished beliefs of a society, in a way that would normally make the Left tremble to contemplate.

The moral is easily drawn. First find your lord, or better a clutch of lords, then propose whatever reform you want. It will save an enormous amount of time, energy and frustration – possibly even bloodshed. And the more the reform goes against the self-proclaimed principles of the lordly sponsor, the more successful you are likely to be, as your allies will be many and diverse. The right wing begins with the enormous advantage that it represents the official history, the putative tradition, of the society. If it disguises its measures in suitable terms it can get away even with revolution, as Hitler showed. The reformers and the radicals on the other hand are seen as sectional, a position which they themselves are often only too happy to endorse. This means that at key moments when radical measures are necessary, the radicals themselves are often debarred (short of making a revolution) from carrying them out by the fierce social conflicts that their attempts stir up. The conservatives are not so inhibited at such times. They can, for one thing, generally rely on radical support, and as long as they can carry the bulk of their party with them they have a more or less united nation behind them.

Clearly for most of the time the Right's main function is to preserve the power and interests of the ruling class. But ever since the French Revolution conservatives have realized that they cannot retain their power merely by standing still or resisting change. Some, like Metternich, tried to, and they and their kind vanished from history. The more successful ones, represented by Bismarck and Disraeli, saw that conservatism had to go on the attack to use the social forces of the new era. It had, often to out-radicalize the radicals, to steal their clothes when necessary. So long as the changes were carried out under conservative auspices, it was a fair gamble that the conservatives would keep ultimate control. And so it has proved. But there are times when the gamble is a desperate one. The radicals, holding that society is corrupt or exploitative, can contemplate its breakdown with a certain degree of equanimity, if not actual jubilation. For the conservatives, national survival and the preservation of social order are necessary watchwords, the very conditions of their existence. Where they seem to be at stake, and where the internal divisions are too bitter for the radical party to hope to act without splitting the nation, the conservative leaders have both the spur and the opportunity to take the initiative; even and especially in what would normally be a radical cause. It is a real risk, since usually they outrage both their followers and their own principles. But on the whole they have done more too badly out of it over the past two centuries. And we, at any rate, have some reason for being glad that the customary hypocrisy of politicians has occasionally proved a vital resource in the very imperfect life of society.

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"There is a young ingenious Quaker in this town who writes verses to his mistress . . . It gave me a hint that a Quaker pastoral might succeed if our friend Gay could fancy it . . . . pray hear what he says . . . Or what think you of a Newgate pastoral among the whores and thieves there?" (Swift to Pope, 1716).

"There is in it such a *labefactation* of all principles as may be injurious to morality" (Johnson, 1775.)

"I should be very sorry to have the *Beggar's Opera* suppressed; for there is in it so much of real London life." (Boswell, 1775.)

It was meet, right and proper that so many of the cast of the current "smash hit" revival of *Guys and Dolls* should be transported from the Olivier into the Lilliputian Cottesloe for the *Beggar's Opera*, though by design as well as good fortune they neither guyed it nor dolled it. For Gay's *Beggar's Opera* is the mother of them all: ballad operas, music dramas, dramas with song and the modern musical. And until the work of Benjamin Britten, it was our truly national "opera", both in the beauty and vitality of the folk melodies and in the satire of obsessive social class. Also, like the modern musical, it was highly speculative economically. Boswell records the Duke of Queensbury saying, when Gay showed him the text: "This is a very odd thing, Gay; I am satisifed that it is either a very good thing or a very bad thing." Congreve is supposed to have said: "it will either take greatly or be damned confoundedly"; and Pope wrote to Swift (as close friends of Gay) that "it will make a great noise, but whether of Claps or Hisses I know not". Swift told Gay, perhaps with friendly exaggeration, that it was as great a satire on mankind as Gulliver.

Colley Cibber, the arbiter of fashion, refused it at Drury Lane, fearing that both its politics and its burlesque of Italian opera would offend the fashionable, but John Rich, a much more dour and down-to-earth character, a self-made businessman, took it for his Theatre Royal in Lincoln's Inn Fields. The first night was a great event, much of high society was present including Sir Robert Walpole, all gathered for the promise of novelty and the speculation as to whether the unsuccessful but promising Mr Gay could at last pull off what his great friends hoped. At first the audience was either quiet or restive, while Peachum and his wife mocked the manners of the age, or rather pursued the ironic line that the poor are just as corrupt as high society and the court; but then daughter Polly's first *chanson pathétique* brought the house down:

Oh, ponder well! be not severe;
So save a wretched Wife!
For on the Rope that hangs my Dear
Depends poor Polly's Life.

Gay's opera was repeated 62 times in that season, when a run of two weeks was counted a great success, and from then on hardly a year went by without – until late Victorian tasts dismissed it as crude and dirty, Frederic Austin's famous revival of 1919, albeit a somewhat romantic version, puts it back on the road again. Brecht and Weill's plunder and rewrite job, *Die Dreigroschenoper*, at least restored the dark tones and the satire, and Britten's "realization" of it (recently revived at Aldeburgh by the Kent Opera Company) was also dark in mood, though did not lose entirely the contrapuntal beauty of the folk melodies. These melodies vindicate a national common spirit against the cosmopolitan artificiality of the court (a common enough theme of those self-made men who practised the new profession of letters, and one that links Swift, Gay, Johnson and even Wilkes).

The text is more complex than many suppose, as the seeming simplicity and deadly punning of Polly's songs well shows. It contains many themes and moods. There is satire against the court and the *beau monde*. Macheath sings to two of his gang that "The Modes of the Court so common are grown, / That a true friend can hardly be met", while he has risked his life to get them money; so honour does exist, but only among thieves. And though Polly declares "a Woman knows how to be mercenary, though she has never been in a Court or an Assembly", yet by reading literature, "cursed Play-books" and "romances", she has actually come to believe that she is *in love* with Macheath and, even more incredible and against "the view of Interest" that has parents taught her, that he loves her and so should not be hanged "by way of business". Romantic love is satirized, Polly *is* silly; only that "the view of Interest" is satirized even more: Peachum and Lockit's utilitarian (and no holds barred) ethic is linked with that the Walpole's (any Prime Minister will do, it does outlive the topical gags and jibes), but it is utterly rejected: this is satire, not cynicism. So Polly comes across (should come across) as only seeming-knowing, silly but nobly innocent: in the true sense of the word, "pathetic". High life and high-flown sentiments are satirized, but virtue is not with the poor. The interest in poverty and crime is partly prurient, though real; yet the plain melodies of the folk songs attest both to a satire on the town and to a rural, popular spirit, spriteliness rather, not yet wholly crushed or urbanized. There is dark Swift misanthropy in it, but also great shafts of gaiety and light. The class war is there and the sex war too, not just the predatory Macheath – "I must have Women . . . Money is not so strong a Cordial for the Time" – but also the brutally affable yet cruelly habitual tyranny of father over daughter.

All these themes and more are in *Beggar's Opera* and they must all be present in any production, but variations in pointing and proportion are inevitable. If ever so mad, as a scholar should go mad, the heading of the crazy manuscript in front of me will be "Notes towards a definitive modern production of the *Beggar's Opera*".

Richard Eyre's National Theatre production is neither definitive nor perfect, but it is very, very good: lively, vigorous and with actors full of joy and love for the play. I went out bouncing almost as if I had seen it in 1728 for the first time rather than in 1982 for the tenth. Such is the difference between a text and a production. Theatre must be theatre:

To start with, the director chose to have actors singing rather than singers acting. Now classical singing is not part of the training or acquired talents of most modern actors, so here is a crucial option: but even bad classical singing is closer to a beggar's opera than the horror of an over-orchestrated score and trained singers trying to act low, as if in pantomime (the Scottish Opera Company did just such a memorably awful version last year). Olivier once got the worst of both worlds in a film with real actors but dubbed singing voices, overall a view of a pretty eighteenth century as seen from a tea-shop window on Richmond Hill (the worst thing he ever did, bar *Hamlet*).

The stage of the Cottesloe was Peachum's lock or warehouse. Its wooden galleries and rafters blended into the side galleries of the theatre itself, a splendid unity of design. My fears arose that clever tricks were afoot when the beggars wandered in wearing late Victorian rags amid fog and dim gaslight; but when Peachum began to sing, he put on a green velvet early eighteenth century frock coat, just as Macheath appeared in scarlet above his Victorian rags. Then all was well. The trick was vindicated. The time change gave us a more familiar Mayhew world of poverty, and these beggars then played their grand old opera: the first thorough-going alienation effect. They even set up oil lamp footlights (Peachum, Lockit or Robin of Bagshot, alias Black Bob, must have had a quiet word with the GLC's safety officers). And instead of the full-blown lush orchestration of the Edinburgh Festival version, four good lads alone did everything that could be done, with clarinet, guitar, concertina, and violin, occasionally picking up mandolin and psaltery. Loud and loving, in the manner of the Albion Band, mainly the good simple folk melodies with a sly touch of rock. But perhaps too simple, occasionally coarsened.

The prevailing tone was dark. Never have I seen a production of *the Beggar's Opera* in which the spoken dialogue and the words and style of the songs were more of a piece. But perhaps too much so: the irony was lost. For there is both light and darkness in the text: if Eyre's version has an obvious fault, it is too uniformly Swift and Brecht, not gay enough. The contrast of colourful and ornamented singing, of mordant, silly cynical words with lovely melodies, is part itself of the joke or satire. Intervals were simplified and grace notes removed. Fair enough, to get a unity of style; but that misreads and smooths over something deliberately discordant. We do not merely have the original melody and then in the third edition of the text (the last in Gay's lifetime) the actual setting of words to the notes: far more elaborate and – damn it – done by than used here. Gay while mocking the new fashion of sentimentality, also adroitly indulges it through Polly; but Richard Eyre ignores it. This simplifying may have been for unity of style or because Polly, an unusually knowing, not an innocent Polly (Belinda Sinclair) and Macheath (Paul Jones), marvellously played as a handsome but vulgar Glaswegian street-seducer, simply couldn't sing well enough. (Yes, I know *the* Paul Jones; but the former rock star couldn't get the grace notes when folk melody satirizes opera.) Lucy Lockit (Imelda Staunton) could – by god she could! – a pocket volcano of anger, some comic effects but some pregnant and real enough to create a shudder for ruined woman's lot: so they left her all her songs and gave them full musical value, except that the slanging match with Lucy (the satire of two divas going at each other) had to be simplified. Polly even lost her most famous "Oh, ponder well" and, even more astonishing, her duet with Macheath, "Oh what pain it is to part"! Inherently beautiful and touching, they had to go. And they got through possibly the loveliest love duet in the native repertory, "Were I laid on Greenland's Coast" And in my arms embrac'd my Lass" as quickly as they could, flattening every note, just crooning to each other "naturalistically". Again, this misses the irony. Gay contrasts the natural and the artificial. The satire of "Italian opera" of that period can surely extend to a type of opera of every period. It is not all lost. I'm philistine enough to think so. And directors should "ponder well" before cutting any song: Gay is no Wagner, but my reading is that every song and its words are an integral part of mood or action.

Peachum (Harry Towb), since we cannot all laugh at Walpole any longer, adopted a thick Ulster accent in which he said the most terrible things about murder, death and betrayal with bland affableness. But Lockit (David Ryall) played the more tradi-

Love in shackles – Polly Peachum (Belinda Sinclair), right, chastizes Macheath (Paul Jones), watched by Locy Lockit (Imelda Staunton) in the National Theatre's production of *The Beggar's Opera*.

Polly by gaslight

Bernard Crick reviews the National Theatre's production of *The Beggar's Opera*

tional "good old (nasty) cockney role (complete with a timeless woolly waistc't) and sang with bold uproar as if in the Players Music Hall – absolutely right, just as Mrs Peachum (June Watson) both acted and sounded the part, a raucous thin-boned pseudo-gentility. Choruses went better, professional singers could hardly match the ugly oddity of the gang and the trio of Lockit, Peachum and Mrs Trapes were sublimely comic. Comic, yes, but as Irlin Hall sang the fat brothel keeper's last line, "Lip to lip while we're young, then the Lip to the Glass", she shuddered with a Dr Johnson-like *momento mori*, old mortality crept in behind the gin fumes – that was a fine touch. The laughter of life and the fear of death are so close together in Gay's world. If Macheath and Polly were each well played as strong, plausible characters, the other main characters brought out better the light of song and the shade of words.

Yet it is a matter of stress and the vices of one producer can bring out unexpected virtues. The words of Macheath's "dying" melodrama were wisely shared with two (somewhat more) musical off-stage voices of his gang. But I have never seen his final "I tremble I droop! – See my courage is cut" better acted as he "turns up the empty bottle" (says the original stage direction, ignored by that toffee-nosed Edinburgh lot). For at the end the gallant Captain, brave and honourable with fellow men, utterly callous to any individual woman (if such a thing can be imagined), obsessed merely with "the sex", can only face violent death brimmed up with Dutch courage. It was a sobering moment. So "cry, a reprieve" is needed indeed if we are not to be frightened as well as shocked and amused at the inversion of social values. But on the other hand I cannot tear myself away from this wonderful spectacle without commenting that, as usual, the ladies of the town were hideously overdone Do producers think that Gay was queer trying to put men off women Excess breeds excess. Richard Ey needs reminding that a single flash an inch of gartered thigh is mo erotic than constant exposure to *gallantry did not forbid two eig* dropping trousers at the pro interests of proper prudery, not public decency. Yet a score of subt touches. We see Macheath go fr the Marylebone gaming house to g money for his companions, as a stag within a stage; and when Lucy an Polly slang each other around th manacled Macheath, the other priso inmates and warders watch excited through the bars, like a theatre aud ence watching a beggar's opera.

The great satire certainly came out; that self interest should conquer natural feelings. When Filch admi to Mrs Peachum his fear of being c off in the flower of his youth, sh points her reply with a compassion ate: "I thought, Boy, by this time thou hast lost Fear as well as Shame". And Lockit reproves h daughter: "If you would not b look'd upon as a Fool, you shoul never do any thing but upon th Foot of Interest. Those that are otherwise are their own Bubbles." S just a point of intellectual history and this mildly critical celebration a fine production of our great pe Britten English opera. Lockit's re marks about "interest" so far predat Adam Smith and utilitarianism th they show, as often, how much ph losophy only systematizes (as should) "the thoughts of the age" the *Zeitgeist*. But there is one auth who preached utilitarianism befo both Gay and Smith and, moreove did it satirically – much like Ga Bernard Mandeville in his *Fable the Bees* (1714) or "private vic public benefits": private extrav gance stimulates public industry an on the other hand, public broth preserve from assault the honour private women. I can find nothing any of the books on Gay to sugge that he knew Mandeville. Yet th hunted in the same kind of territor humane satire with mock harsh ne Gay does not hate mankind; would either change it – somewhat or indulge it. And not by mockin the rich does he champion the poo he speaks for "the middling men", good bourgeois.

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BOOKS

'Behold, I make all things new'

by David Martin

The Great Code: the Bible and literature
by Northrop Frye
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The Bible is a very peculiar work. But then, of course, it is not a single work at all, but a collection of variegated materials edited and selected to form a sacred canon. Nobody wrote it, and the names of authors attached to this or that book do not usually tell us who composed the different sections. "Isaiah" is by various hands, David wrote few, if any, of the Psalms, it is uncertain whether any of the gospels were composed by the immediate followers of Jesus, and even the letters ascribed to Paul are not all from his pen.

None of this matters much, since individualized authorship was not important to the near eastern cultures which produced the Bible. Authorship is a minor issue compared to the question of historicity. The Bible appears to be telling us of historical events, notably the vicissitudes of Israel and the life of Jesus. We pick up I Samuel, say, and we seem to be reading a form of historical narrative. However, this kind of historical narrative definitely does not consist of "one damn thing after another". What we have is a pattern, not of damn *things*, but of damnation and redemption, fallings and risings. It is, as Northrop Frye points out, a succession of U-curves, set within the all encompassing U-curve of a Paradise Garden, a pilgrimage punctuated by apostasy, and a restored City, New Jerusalem. The Bible presents a *model* of exemplary history, not a succession of events.

The final descent and restoration is found in the life of Jesus, who comes down from heaven, is crucified under Pontius Pilate, rises again and ascends once more into the heavens. But this "life" is no more biography than I Samuel is history. The gospels exhibit a series of kernels which select paradigmatic events or stories in order to proclaim and to exhort; and these kernels are arranged by the evangelists in four different patterns leading up to one overwhelming event, the re-enactment of the Passover in the shedding death of Christ. The central figure of the whole Bible is the slaughtered Lamb, who appears in the final book of all as "the Lamb in the midst of the throne". It is he, and he alone, who is "worthy to open the Book and loose the seals thereof".

Well, that sounds like a theological conclusion, backed by Christian Alleluias and leading up to the last two choruses of Handel's *Messiah*. But it is actually the conclusion of a structuralist analysis, conducted by Professor Frye, who seems to be an agnostic, and who has only the most incidental curiosity as to whether any of these events ever happened at all. For him the primary meaning is the metaphorical and typological meaning, pointing towards a dramatic centre, and the secondary meanings, which seem to involve history or even to imply propositions are quite subordinate. And such an approach is reasonable enough, given Professor Frye's chosen angle of vision. He is, after all, a very distinguished literary critic, teaching at the University of Toronto, who has put forward theories of the historic development of different kinds of discourse. The Bible challenges his theory by forms of writing which are *sui generis*, lying askew his categories. Beyond that Professor Frye has been incubating this book for years to help students whose ignorance of the Bible deprives them of real access to almost the whole tradition of English literature from Langland and Chaucer to Eliot and Auden.

The Bible is not just poetry, or wise saws or stories with edifying messages, or folk tales. The pattern which the Word reveals, pointing through typological sequence after sequence, concerns history and affects history. This pattern repudiates the natural cycle of eternal recurrence and moves forward from beginning to end, Alpha to Omega. Mankind does not revolve round and round on an historical wheel, but passes through revolutionary phases which are breakthroughs – above all, for Hebrews, the Exodus and the Resurrection. So while the biblical material may not be historical as we understand the writing of history, at the centre of it all is a *narrative*, concerned with the collective progress of Israel and the individual mission of Christ. This narrative exhibits images of movement, and these create the idea of "the movement".

So what are the phases? How do the types accumulate? Where do we locate the risings and fallings? In what ways are the metaphors organized round a common centre?

Frye describes seven overlapping phases. In the beginning the visible world was hurled into an ordered structure by the power of the creative Word. Man, and nature, created in the image of God, became marred but not utterly and irredeemably ruined. Then there follows the colloquy with Moses from the burning bush in which God gives himself a name and declares himself behind the oppressed people. The people advance from slavery to liberty. Then comes the giving of the Law, which is moral, judicial and ceremonial. But law is general and needs to be individualized through experience and proverbial lore. So what the law leads on to is Wisdom, which has to do with right and accepted ways, continuities and prudent counsel. In *Ecclesiastes* this becomes a sense of the vanities for which we misuse our energies. The wise man expends his energies aright, in the words of the Vulgate (Proverbs viii, 31) "*ludens in orbe terrarum*" – playing over all the earth. Wisdom, however, is not enough. Man, alienated from himself, prophetically heralds a restoration, either of a saving remnant, or of all mankind. Finally, gospel and apocalypse dramatize the demand for metanoia, that is, the great change or spiritual metamorphosis, in individual men, in human relationships and in nature. Thus New Jerusalem and the New Creation come to birth, redeemed and glorified through pangs and suffering.

The broad phases from Creation to Re-creation can be played off against a sequence of risings and fallings. These comprise the small U-curves tucked inside the all-embracing U-curve. Abraham sets forth not knowing where he is going, but finds a Promised Land. However, after various vicissitudes, this sequence ends in enslavement by Pharaoh in Egypt. Moses sets forth, through sea and desert, and Joshua actually leads the people once more into the Promised Land of milk and honey, but new invaders arrive, above all the Philistines. These two sequences run from a pastoral to an agricultural society. The Davidic and Solomonic Kingdoms arise and establish an urban centre, Jerusalem. But the Kingdom falls apart, and the northern Kingdom is destroyed by Assyria and the southern by Babylon. The people enter the Babylonish captivity. They return from Babylon but once again fall under successive dominations which come to an appalling climax with Antiochus Epiphanes. The Maccabees revolt and renew the liberties of Israel until eventually the country slips again beneath the heel of the conquiror, this time Rome. Jesus then proclaims a spiritual Kingdom, embodying all the prophetic promises, which Paul expands to take in all mankind: neither "Jew nor Gentile, male nor female, bond nor free, but all one".

As the various *mythoi* succeed one another all the high points and low points can be joined together. Eden, the Promised Land, Jerusalem and Mount Zion are interchangeable synonyms for the home of the soul and the Kingdom of God; Egypt, Babylon and Rome together represent a single spiritual contrary. The figures of Pharaoh, Nebuchadnezzar, Antiochus Epiphanes and Nero (the Beast of Revelation) are gigantic summations of evil set over against the deliverers, Abraham, Moses, Joshua, the Judges, David and Solomon. All these are prototypes of Christ.

Northrop Frye

The New Testament itself refers back to all the prototypes, above all to Isaiah's vision of restoration, which opens St Mark's Gospel, and to Moses and Elijah, who in the depiction of the Transfiguration appear alongside Christ to indicate the consummation of the law and of prophecy. Jesus, like Moses, begins his life with an escape from the wrath of an earthly King. The Magnificat sung by his mother mirrors Hannah's song over the infant Samuel. As Moses organized 12 tribes so Jesus calls 12 disciples. Israel wanders 40 years and Jesus spends 40 days in the wilderness. Israel receives nightly manna and Jesus miraculously feeds five thousand with their daily bread. The law is given on Mount Sinai and the new law of grace is proclaimed in the Sermon on the Mount. And (to quote St John) "As Moses lifted up the serpent in the wilderness even so must the son of man be lifted up". The Gospels, and the Apocalypse, similarly, are a mosaic of allusion. Indeed, the Apocalypse is a reworking of Ezekiel, Daniel and Zechariah. It exhibits, as Ezekiel put it, metaphorical "wheels within wheels".

However, these are only some of the ways in which a unity can be discerned. There is also a basic repertoire of sheep and pasture, harvest and vintage, vineyard and wilderness, city and temple, "all contained in and infused by the oasis imagery of trees and water that suggests a higher mode of life altogether" (page 139). Let me take only two elements in the repertoire: city and temple, tree and water, because these appear together in the final vision of Revelation, chapters 21 and 22.

Jerusalem, the mother city (metropolis) is set on a hill "whither the tribes go up". It is the place where the universal language of "tongues" is to be restored, by reversing the tower of Babel. Within the city is the temple, and within that are partitions separating off outer and inner courts, and the Holy of Holies. Frye describes a narrowing down of sacred space, from all of the wide expanse of Eden, down to Judah, then to Jerusalem, then to the Temple and finally the Holy of Holies. The Holy of Holies was entered once a year by the High Priest. But in the gospel Christ cleanses the outer court, and then in Hebrews he destroys the partitions, entering the Holy of Holies as the Representative Man. Sacred space is then finally destroyed altogether as made "temporary priests to God" in a world where the Temple is re-identified as the body of Christ and his followers as pillars and living stones. This means that in the New Jerusalem, the temple is replaced by the body of Christ, which is also "the Lamb in the midst of her". This body has been destroyed but is then again it is the temple of the holy spirit. Christ and Jerusalem are consummated together as one and universal, the bride-groom and she, the bride.

The tree and the water also spread out to encompass creation and re-creation. The human caravan moves through the wilderness and the solitary place, by the straight path in the desert, from the oasis in the original garden to the oasis in the final city. There is the first tree and the fountain, set in the garden, which leads eventually to the second tree and the pure river, set in the midst of the city. These oases represent the high order, the great original and the final end, where the river of the water of life flows freely. Moreover, as Frye emphasizes, the *new* of the New Testament and the New Jerusalem is quite open-ended. The Bible concludes "Behold, I make all things new".

Whatever we make of this structuralist ordering of the two Testaments, it is one which reads back from the end. The centrality of Christ, which Frye posits, is given by the way the allusions in the New Testament summarize the Old. When Frye says that the Bible itself demands to be read this way, he means surely that it does so once the New Testament is included as integral to the whole. The New Testament is clearly typological and Christian exegesis maintains, in the words of Aquinas in the Tantum Ergo, that "types and shadows have an ending".

This is a book of rare insight and intellectual beauty, but it leaves the reader with some important questions. Professor Frye emphasizes the internal relationships which characterize poetic utterance, and how in each grain of utterance there resides the whole gamut of meaning. That, of course, is true. Each theological atom explodes in a huge circuit of meaning and the "play" of internal relations provides an inexhaustible variety of connexions, rather as in music. But do these *refer* to anything? Frye says they cannot be demythologized, and given a mundane translation. It seems to me that some can. For example, the washing of the disciples' feet by Christ, and the ceremonies which derive from it, are clear inversions of the master-disciple relationship. The prince of glory on his cross signifies the vulnerability of love and a new meaning to power. But other signs cannot have a straight translation, precisely because they refer to a hidden potential waiting in transcendence, or point towards the Beatific Vision of the cherubim and seraphim of the Sanctus, veil a glory which beggars the imagination, which defies an adequate image.

But how you phrase all that depends on whether you are a believer. The Christian religion is, after all, about an embodiment in history and an atoning death "under Pontius Pilate". Professor Frye is not much concerned with history and almost chides Christian and other critics for their concern with what did or didn't happen. Well, of course, there is a form of criticism that has given up the question of historicity and holds that the kernels we have in the gospels are documents of faith behind which we cannot go. On the other hand, the quest for the historical Jesus is one of the great moments of integrity of the European mind, above all in Germany. Once we grant that Jesus is not one of his own parables, we are surely back to the question of God embodied, exemplified, vulnerable, and active in a particular historic existence. Does the vast series of types and mounting succession of images point towards a real dramatic centre in a suffering person, or simply to the poetic centre of a closed mythological circle?

Certainly the Christian liturgy, which deploys the same techniques as Professor Frye, points unequivocally towards a historical, suffering person, and is the real summation of the typological sequence. But whether you read the Bible as "The Great Code of Art" or the Word of Salvation, it is remarkable that both an agnostic structuralist interpretation and the exegesis of faith arrive at the same mode of understanding. That faith and agnosticism should so conjoin is almost the most remarkable aspect of a very remarkable book.

David Martin is professor of sociology at the London School of Economics. His book "The Breaking of the Image: a sociology of Christian theory and practice" was published in 1980 by Blackwell.

BOOKS

Radical sympathies

Politics and Ideology in the Age of the Civil War
by Eric Foner
Oxford University Press, £11.50
ISBN 0 19 502781 7

Eric Foner seeks to put politics back at the centre of American history. While other young historians have delved into esoteric topics of social history, his attention has remained fixed on the political dramas of the American Civil War and Reconstruction. Chiding the social historians, he points out that by ignoring the war they ignore the fundamental reference point in the lives of ordinary Americans in the nineteenth century.

Foner is not dismissive of the concerns of social history, however. His understanding of politics extends to a consideration of the many ways in which power is exercised in society. In his analysis of political ideology he describes how political thought responded to dramatic economic change. What Foner seeks to do is to integrate the varied concerns of traditional and "new" historians in order to elucidate "the interplay of race, class, and political ideology in a society undergoing both a sectional confrontation and an economic revolution".

This collection of seven essays written between 1965 and 1980 shows how tenaciously and successfully Foner has grappled with this demanding subject. Three essays make important contributions to our understanding of the Civil War by analysing its causes and consequences within a larger interpretation of economic and political development. The other essays are particularly humane and sympathetic treatments of radicals who stood outside the mainstream development, and he clearly thinks that radicalism played an important role in the American political process. Indeed his own work is consciously radical, seeking by a criticism of what happened in the past to make Americans aware of how they might make things different in the future.

At its heart Foner's vision of the Civil War is a profoundly ironic one. Northerners attacked slavery because they saw it as a threat to cherished values of political democracy, individual social advancement, and economic independence. White southerners went to war to defend an ideal of a static, hierarchical society. The irony, of course, is that the war itself did much to destroy both visions of the good society. In the North the creation of large-scale industry and the leviathan state reduced democracy to a sham and economic "freedom" to an unequal contest between powerful corporations and disorganized wage labourers. In the South (and Foner's essay on Reconstruction, in the South is really the most novel and compelling in the book) things were even worse. The old order was destroyed, northerners cooled to the idea of implementing free labour ideology in the region, and white landowners were able to fix a vicious system of economic and political repression on the freed blacks in "an anomalous struggle between two weak economic classes, each of which sought to use political power to obtain economic objectives".

Given this pessimistic vision it is no surprising that Foner's heroes are the radicals of the day, and the four remaining essays deal with abolitionists and trade unionists, the Free Soil party, Thaddeus Stevens, and Irish-American radicals. Compared with the slightly mechanical, slightly impersonal framework of the broad interpretive pieces, these essays add a welcome human dimension by showing actual people grappling with the same times these essays are also designed to show that varied radical movements were not so isolated from each other as historians have argued and to defend radicals from charges of political failure or irrelevance. On the latter question, he emphasizes the role of the agitator in galvanizing and leading public opinion. It is a fair and important point, but one cannot help feeling that the picture of politics being presented is not as full as it might be. If, as Foner argues, Americans developed mass political consciousness before relations of dependency like wage labour became economically predominant, and if they moved into the Gilded Age without massive and continued political protest, one suspects that a great many ordinary Americans were really quite satisfied with the changes taking place in their lives. To be truly effective, radical history must take account of popular conservatism as well as radicalism.

M. D. Kaplanoff

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Greatest happiness?

The National Charity Company: Jeremy Bentham's silent revolution
by Charles F. Bahmueller
University of California Press, £17.50
ISBN 0 520 03796 0

Bentham continues to tease us 150 years after his death. There are still vast quantities of unpublished manuscripts and Bentham scholars tell us we need better editions of the published works. There is still much to know of Bentham's prodigious mind and historians will therefore much appreciate Charles Bahmueller's guide to Bentham's writings on the relief of poverty, which represent about 4 per cent of the philosopher's total output. As a researcher on the Bentham project and as an assistant general editor of *The Complete Works of Jeremy Bentham*, Dr Bahmueller is ideally qualified to give us the authentic "Bentham on poverty".

After reviewing Bentham's preliminary and casual thoughts, the author launches into a systematic explanation of Bentham's ideas first worked out during the crisis of 1795–96, which also generated the two abortive bills of Whitbread and Pitt. Bentham's uncompleted and unadopted scheme was for a "National Charity Company" using the "panopticon" principle to relieve indigence through an ultimately self-financing withdrawal of claimants into an alternative and isolated economy, where behavioural controls would lead to utilitarian regeneration.

Bahmueller explains the relationship of this "poor-panopticon" to the more famous "prison panopticon", elucidates the values and ideology which underpinned it, delineates its proposed organization, identifies its economic character and illuminates its potential for social engineering. The author brings to this task an encyclopaedic knowledge of Bentham's writings and he is able to move freely forward and back to trace Bentham's thinking. Since the daily output of a long life survives in disjointed form, such overall control is essential for a coherent Benthamite view to emerge.

This is no adulatory exposition of "Bentham the Great", for the author adopts the apparently prowling fashion (used by F. B. Smith in his study of Florence Nightingale) of placing his subject in the dock of history. And Bentham is well and truly indicted here for potential crimes against humanity. Better that Bentham should have remained frustrated, Bahmueller concludes, than that tens of thousands should suffer at his hands. Never before has the icy grip of a Benthamite regime been so chillingly revealed nor the dark underside of the greatest happiness principle so explicitly stated. For the greater good (and even more specifically for the good of the minority) Bentham was prepared to enforce incarceration of the indigent in a labour colony where discipline, control and ultimate subjection were the objective.

Far from being the father of humanitarian liberalism, this Benthamism seems the begetter of totalitarian slavery. Although the author does not make the point, one cannot prevent the eerie thought that the compulsory tatooing of "birth marks" on the arms of the inmates and the rounding up of inferior marginals, both in the Bentham programme, were characteristic of Nazi concentration camps. With a sharp eye for contemporary allusions, Bahmueller, surely correctly, surmises that Bentham would have been overjoyed with computerized mass finger-printing.

As an exposition on the "real Bentham" this book could scarcely be bettered but its conception as Bentham *qua* text precludes a proper assessment of the impact of Bentham's ideas. Of course we need to get Bentham right but we also need to know what influence his thinking had, and in this respect Bahmueller substitutes assertion for analysis. It is clear that the "poor-panopticon" was doomed but its underlying ideology provided much of the context of the reform of the Poor Law. What this book does implicitly is to return Benthamite ideas to the centre of the policy-making stage whence they were banished by MacDonagh. In this respect Bentham's 4 per cent might equal 8 per cent of 1834, but this is an ideas-policy relationship which is beyond the scope of this valuable but rather narrowly conceived book.

Derek Fraser

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States will be states

A History of European Integration, volume one, 1945–1947
by Walter Lipgens
translated by P. S. Falla and A. J. Ryder
Clarendon Press: Oxford University Press. £48.00
ISBN 0 19 822587 3

One of the central issues in the current institutional crisis of the European Community is whether decisions should be taken by majority vote or whether all member-states should have the right to exercise a veto on matters affecting what they regard as vital national interests.

The latter principle, which has been passionately invoked by the British Government in the 1982 row over the fixing of agricultural prices, was enshrined in the so-called "Luxembourg compromise" of January 1966 – in fact not a compromise at all, but an unhappy acceptance by the partners of Gaullist France that in the last resort France, if not other member-states too, would insist on exercising a veto rather than accept majority decisions. The British Government's ardent espousal of this Gaullist view means that, as Mrs Thatcher sees it, states will be states, and that this is entirely right and proper.

It is striking to read, against the background of this strident reassertion of national sovereignty, the history of the affairs of western Europe in the years immediately after 1945, when – on the Continent at least – it was almost universally assumed that the nation-state, as the vehicle or framework for political, social and economic organization, was well and truly finished, and that the future lay with the transfer of sovereign powers from the ruins of Europe's 26 nation-states to a larger, more effective, and morally more worthy form of supranational authority.

One of the merits of the minutely detailed study of the period 1945–1947 by Walter Lipgens (professor of history at the University of the Saarland and the European University Institute in Florence) is that he carefully dissects and presents the different strands of thought and action which lay behind the movement towards the institutional reorganization of Europe as it developped by the end of 1947. He shows how, in the first year or so after VE day, the widespread view that the bankrupt nation-states of Europe should be replaced by something bigger and better in fact had to contend with the reassertion of national habits of thinking, the re-establishment of national bureaucratic structures, and the assumption by many politicians and others that public life could begin within the old national frameworks: in the early months of the Fourth Republic, or in the aftermath of fascism in Italy, or even in the western zones of Germany, occupied by the victorious allies, the first attempts at economic and political reconstruction were made within the old national frameworks.

As Professor Lipgens shows very clearly, it was only after the appalling winter of 1946–47, when European economic recovery was visibly faltering or failing, that the prophets of federalism began to come into their own. By May 1947, after Churchill's Zurich speech calling for "a kind of United States of Europe" and the vigorous campaigns of the European Union of Federalists throughout western Europe, the political leaders of the main countries – at least on the Continent – began to think actively in terms going beyond national frontiers. The movement towards European unification was not only due, of course, to the failures of economic planning at the national level: as this study amply confirms, the precarious position of western Europe in the international system, with the tension between the two super-powers developing into overt cold war by 1947, was one of the most important factors in bringing the leaders of Europe together.

In the third and last of the sub-periods covered in this study (May–December 1947) the author gives a vivid picture of the rising tide of European federalist sentiment in many national parliaments and the growth of a mass movement of public opinion, and he also brings out more clearly than previous studies have done the central role played by the Marshall Plan and the European Recovery Programme in stimulating western Europe's attempts to unite.

As Professor Lipgens rightly argues – basing his conclusion partly on detailed chapters covering the Marshall Plan and its effects by Wilfried Loth and Alan Milward – the line-up of forces by the end of 1947 had decisively shifted in favour of the concept that western Europe should organize itself politically and economically. The "pluralistic" blueprints for European federation either in the chaotic interwar years, or in the concentration camps of the Third Reich, or in the desperate year of 1945 itself, had originally been opposed not only by the stubbornness of national political leaders and the inertia of reviving national bureaucracies, but also by the hostility to European union of both the superpowers now dominating the world. By late 1947 one at least of these super-powers had swung over to an active commitment to help western Europe to unite – partly, of course, to create a bluwark against the other super-power – and this shift decisively increased the momentum which was to bring European institutions of a kind into existence by the end of the 1940s.

Professor Lipgens's treatment of this theme, which goes into vastly greater detail than any previous study, is prefaced by an introductory chapter of nearly a hundred pages, which surveys the background and the ambiguities of the idea of European unification: he considers the critical question of where the eastern frontier of a unified Europe was supposed to lie (including Poland or not?), and underlines the geopolitical vulnerability of western Europe, which determined the form that the postwar institutions were to take. As he tellingly reminds us in his conclusion, "by the standards of the new age the European countries were no more than petty Balkan states, and their only prospect of survival lay in economic and political union".

But what form was this union to take? For many of the activities in the European movement, the answer was simple: what Europe needed was nothing less than full-fledged federation on the American model; any pragmatic little steps of functional cooperation on specific issues should only be seen as steps towards this goal. On the other hand, Churchill's idea of "a kind of United States of Europe", as set forth in his historic speech in Zurich on September 19, 1946, was much vaguer: not only did he deliberately abstain from suggesting an exact programme, but he warned his European audience that the lead in the enterprise must be taken by France and Germany: as he saw it, Britain and the British Commonwealth, as well as America and perhaps the Soviet Union, would be the external "friends and sponsors of the new Europe" and this was a clear indication that even for Churchill, the great spokesman of European unity, the frontiers of a united Europe would only extend to the English Channel.

In the chapter dealing with the policy pursued by the British Foreign Secretary of the time, Ernest Bevin, Professor Lipgens has been able to draw on new documents not available when the German edition of the book was published five years ago. He confirms that Bevin, although preoccupied with non-European issues and sceptical of premature moves towards the *institutional* reconstruction of Europe, was deeply concerned to create some kind of binding links between Britain and the Continent, and that Europe thus played a central part in Bevin's foreign policy. The relatively few surprises in this volume, however, are surprising precisely because, surprisingly, in such a massively documented work, there are a few small factual slips: the Heidelberg Programme of the German Social Democratic Party was adopted in 1925, not 1928, and the initials of the LSE Professor H. R. G. Greaves are wrongly given on page 64. In general, however, this book will remain a landmark in the history research on the postwar unification of Europe. For any Europeans, or others, seeking clarification on how the movement towards the European Community began, and what were the precise nuances of its strengths and weaknesses in the formative period after 1945, Professor Lipgens's study will long remain an essential work of reference.

Roger Morgan

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BOOKS

Caviar to the general

Cooking, Cuisine and Class: a study in comparative sociology
by Jack Goody
Cambridge University Press, £19.50 and £5.95
ISBN 0 521 24455 2 and 28696 4

Mentalistic approaches have so dominated anthropological thinking about food and cooking in recent decades that Jack Goody is able to quote at least one anthropologist who solemnly recorded, with an air of surprise, that most Africans think of food primarily as a means of staying alive. Personally I have never been able to take seriously Lévi-Strauss's "culinary triangle" of the raw, the cooked and the rotten, and its associated triangle of recipes. Yet they have transfixed almost everyone working in the field. Even if it were possible to establish a small set of components that describe the oppositions of cooking terms in all languages – which is still questionable – it is not at all clear that that would be much use to anyone seeking to understand why particular cuisines came to be what they are. The seductive pursuit of constants underlying empirical diversity usually ends by making obstacles to the explanation of processes of development. This is clear when Lévi-Strauss permits himself to speculate about specific issues such as the origins of differences between French and English food – speculations which are generally laughably crude.

Mary Douglas's "cultural" approach to meals as codes, though more evidently related to the social contexts of eating, is equally mentalistic. As Goody points out, the argument that food is "symbolic" of *social relationships, that there is "a correspondence between a given social structure and the structure of the symbols by which it is expressed"*, is dangerously close to circularity.

Goody's excellent book should go a long way to swinging the balance back towards the concern of earlier anthropologists such as Audrey Richards with the material and social organization of food and eating, as well as with their cultural meanings. Apart from his polemical intent, which is lucidly displayed in an opening chapter on the "state of play", Goody's substantive purpose is to explain why in most of Africa, unlike in Europe and Asia, there never developed a *haute cuisine*. A long chapter of "thick description" is devoted to the production, distribution, preparation and consumption of food among two North Ghanaian tribes, the LoDagaa and Gonja, which Goody has studied over three decades. He describes them, and most of the other tribes of sub-Saharan Africa, as "hieratic" as opposed to "hierarchical". Their mode of production was not associated with very marked social stratification, nor with the formation of courts socially very distant from the population at large. There were few differences of diet or of culinary culture between strata. Among the few exceptions to this pattern in Africa were Ruanda, where the Tutsi ruled the Hutu, and Ethiopia, where unusually both the plough and feudal dues were found.

The contrast with the hierarchical societies of China, India and Europe, all of which developed *hautes* (and *basses*) *cuisines*, is very obvious, and Goody provides a brief and superficial but absorbing sketch of the culinary history of the "high and low" in each of them. He rounds off his argument with an account of the industrialization of food production, and the impact of the world food system in Ghana, where a new pattern of stratification based on literacy (a connexion here with a lot of Goody's other recent work) is emerging. He concludes that:

> The analysis of cooking . . . can never be a matter of ascertaining "meaning" alone, if by that we imply meaning to the actor . . . A complex system of sub-cultures cannot be analysed in such simplistic, individualistic terms, especially when the culture of a ruling class may have international rather than a national reference.

Goody subtitles his book "a study in comparative *sociology*". Anthropologists, I suspect, usually find the work of sociologists rather "obvious" compared with their own profound problems of interpretation. On this occasion, sociologists will find the thesis that the development of cuisines is bound up with stratification and competition a little self-evident. Certainly the processes need working out in a more sophisticated way. But this is a fascinating book – especially for those like me who are unfamiliar with Africa or its food – and its influence in stemming the tide of mentalism in anthropology will be all to the good.

Stephen Mennell

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British photographer Euan Duff's vision of a supermarket, taken from Exploring Society Photographically edited by Howard S. Becker (University of Chicago Press, £7.00).

Rules of society

In the Active Voice
by Mary Douglas
Routledge & Kegan Paul, £9.95
ISBN 0 7100 9065 X

Mary Douglas is a mercurial and idiosyncratic figure in British anthropology, as this new collection of her essays amply illustrates. Spanning the period from 1958 to 1980, the articles weave in and out of her many books, drawing connexions between the extraordinary range of topics she has studied, developing and clarifying positions argued elsewhere.

Since the publication of her enormously successful *Purity and Danger* in 1966, she has commanded an audience far wider than that of the discipline itself, and for many non-specialists her writings have become the major source of anthropological insights. That book was concerned *with the theory of taboo; rather than accepting piecemeal, utilitarian* explanations of different taboos she argues that they could only be understood in the context of the symbolic classification proper to each social universe. In particular she attacks reductionist and materialist explanations of what she argues can only be interpreted fully as a set of meanings, a system of communication.

In several of the articles republished here she takes up this same theme in such diverse fields as population control, food consumption, and religion. Her approach can perhaps best be summarized in her own words in one of the final articles in the book in which she appraises the work of the neglected French sociologist Halbwachs. Halbwachs, she says, "provided his own optimistic solution, in favour of mind and autonomy of spiritual values and against deterministic, mechanistic conceptions of human behaviour." The title of the volume itself reiterates this position: the "active voice" is a plea to rethink the language of sociological explanation in order to rescue the individual from being treated as a "passive object responding helplessly to external causes".

With such a perspective much of her writing takes a polemical stand against theories that she sees as over-deterministic; these include not only Marxism but also much of neo-classical economics, Lévi-Straussian structuralism as well as what she terms "passive voice" sociological theories of religion. This mistrust of grand theory, and the emphasis, even celebration of the diversity and unpredictability of human behaviour and social forms, places Mary Douglas firmly within the mainstream of Anglo-Saxon anthropology, whose achievements have been more in description than in explanation, in establishing correlation rather than causation.

One of the best examples of this approach is an article reproduced in the volume which compares the economic performance of the Lele and the Bushong, two tribal groups living in virtually identical environments to the south of the Congo rain forest. The marked differences in productivity between the two groups, and the contrast in the way they use and value the environment have to be explained, she argues, in the light of significant differences in their social organization, marriage systems and structures of authority. While many anthropologists have relied heavily on environmental factors to explain social organization, particularly of small-scale tribal societies, Mary Douglas here argues convincingly that it is rather social organization that determines the way the environment is exploited.

This example is Mary Douglas at her most subtle; however it also illustrates the limits of what she is prepared to explain. In contrasting the Lele and the Bushong she avoids environmental determinism and instead emphasizes the independence of social organization as an explanatory device. She does not however attempt to explain why Lele and Bushong society should have developed along such different lines.

While in general Douglas eschews explanatory theory, she does have a penchant for typology. Over the last 12 years she has been developing a fourfold schema of social organization, a social graph whose axes are termed grid and group, along which all known societies can be plotted. The idea of grid and group derives from the work of Basil Bernstein and this volume includes the most elaborate version of its implications in a long essay entitled "Cultural Bias". The four types of social environment she proposes are based on the degree to which group boundaries and/or status difference are emphasized. According to Douglas, different cosmological patterns derive from each of these types; they will be reflected in different structures of behaviour as wide-ranging as cookery, old age, sex, gardening, and attitudes to time past.

This astonishing blend of themes is typical of Douglas's approach, mixing the homespun with the cosmic, drawing on her own intuitions together with an eclectic range of sources to produce ideas which are at best brilliant and stimulating, at worst inconsistent and trivial. Her typological approach allows her to sidestep not only the issue of class, and cultural difference as these are conventionally understood, but also to ignore the very real problems of comparing, say, a New Guinea pre-capitalist society with "modern" society which she conveniently avoids defining too closely.

Her position is also paradoxical: in spite of her reiterated emphasis on individual innovation and manipulation of the rules, she remains firmly within a Durkheimian sociology of knowledge. Her perspective is also rather than historical. In spite of her repeated assertion of the need to reinstate the "active voice" and the importance of the individual response to the social environment, her most fruitful insights concern the rules themselves. At the end of the day, the oblique storyism which celebrates entrepreneurial skills yields little; she is clearly fascinated by fluid and competitive social environments, whether these be in the New Guinea highlands, or the artistic milieu of London in the 1830s, or contemporary turkey farmers in East Anglia, but she defeats her own purpose in making the entrepreneur who flourishes in a particular type of "low-grid, low-group" environment into the prototype of all innovative and creative activity. The "negotiating individual" as she terms this (exclusively male) actor is more and more equated with the man who successfully manipulates social rules to his own advantage, usually in the pursuit of prestige.

Anthropologists are often castigated for the apparent marginality or irrelevance of their work. Mary Douglas has herself been on the receiving end of such criticism. The range of work exemplified in this volume leads one to the conclusion that it is still in their detailed and meticulous observation based on fieldwork that anthropologists have something unique to contribute. The early articles concern Douglas's research among the Lele. Here all the later themes are already present, but are based on first-class ethnography; when writing of our society she often becomes superficial, assuming (erroneously) that we are all successful ethnographers of ourselves. Where proper ethnographic techniques are applied to the study of working-class food consumption the results are fascinating, if limited in scope. This volume demonstrates the range of problems and policies to which anthropological approaches and insights can be applied even if the conclusions do not always match the scale of the intention.

Olivia Harris

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Natural laws

Rules and Processes: the cultural logic of dispute in an African context
by John L. Comaroff and Simon Roberts
University of Chicago Press, £19.25
ISBN 0 266 11424 4

The authors of this book (the first a social anthropologist, the second a lawyer) are already well known for their distinguished work in what they would probably prefer not to call the anthropology of law, for this is an essentially provocative and contentious label.

What is the "law" that there is said to be an anthropology of? Early, pre-anthropological stereotypes suggested that law was the distinguishing attribute of advanced societies; not to be found among savage peoples who regulated their social relationships (if they regulated them at all) by supernaturally sanctioned custom combined with sheer brute force. The claim that "law" was an appropriate term to use of pre-literate or "primitive" societies thus represented an important advance on the earlier position, and for many decades governed scholarly approaches to disputes and their settlement.

Although, or perhaps because, the older generation (Radcliffe-Brown, Schapera, Gluckman, Fallers and others) tended to accept and indeed often to argue for "law" as an authentic category of social action, this way of thinking has increasingly come under attack. One kind of attack can itself be traced back to a "founding father" of the discipline, Malinowski. At its worst, this criticism seeks to reduce law to merely an ethnocentrically conceived type of "social control"; norms and rules and so forth are purportedly exposed as little more than obscurations of the real stuff of disputes and settlements, which consists of power struggles, tactical manipulation, the mutual interplay of self-interest, competition and alliance. The political is the reality, of which the legal is the distorted image, refracted through the deceptive prism of ideologies both indigenous and imposed.

In their introductory chapter, Comaroff and Roberts, though perhaps failing to do justice to the "legalist" tradition as itself a corrective to the condescending ethnocentrism of what went before, offer an eloquent and searching account of the recent debates. They seek, however, not to take sides in this polemic in its own terms so much as to transcend it altogether. They give full weight to the place of norms and rules in the conduct of inter-personal and inter-group relationships while at the same time treating them in their turn as (at least in part) elements in the policies and projects of individual actors in disputes. In this way, the issue "is this law?" can be interpreted not as a pseudo-ontological conundrum but as a researchable question about particular socially constructed worlds: law exists in so far as people give it reality in their transactions.

The central chapters (predictably and correctly concerned with marriage and property issues) show in detail and through finely documented case studies how the norms that nominally "govern" the outcomes of disputes among the Tswana are rich in ambiguity, and should rather be seen as establishing paradigms of discourse and rendering settlements socially meaningful after the event. Although the authors do not put it quite like this, normative rules can be regarded as offering *reasons* for particular outcomes, not *causes* of them, although both in traditional societies and in our own much more lawful rhetoric suggests the opposite.

This is a work of impressive scholarship in which theoretical sophistication and ethnographic richness are convincingly matched. It suffers from two principal faults, of quite different kinds. Much of it is written in a peculiarly barbarous and jargon-ridden style which often reads like a caricature of social-scientific writing at its worst, rendering even the simpler parts of the argument quite unnecessarily opaque. Secondly, the theoretical ambitions of this study are inevitably frustrated by the limits which a southern Bantu society such as the Tswana set on the range of the discussion. We must hope that these richly talented authors will one day put us even more in their debt by integrating their Tswana researches with comparable work in different kinds of society.

Ian Hamnett

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BOOKS

Double meanings

Conrad and the West: signs of empire
by Jacques Darras
Macmillan, £17.50
ISBN 0 333 28597 2

In his preface to *Tales of Unrest* Conrad tells a seemingly trivial story about the pen he used to write his early works. He tells us that he was very fond of this pen and after keeping it in several places he finally fixed on keeping it in a wooden box. "I would catch sight of it from time to time with a distinct feeling of satisfaction till, one day, I perceived with horror that there were two pens in there." He dealt with this problem by throwing them both out of the window.

All in all this is a trivial and hitherto entirely unremarked-on little autobiographical episode. It is characteristic of this book by Darras that he should take such an apparently meaningless story and make it a start for his insights into Conrad's writing: "It is possible to compare this model of fiction and Conrad's methods of composition." The mysterious dualization of the pen offers a paradigm for what Darras sees as the dual relation which makes of the writer his own reader, "both double and hypocrite". The two pens become an image of "an even more intimate duplicity, of a fission running through the stories like an imperceptible tremor".

There is indeed a "doubleness" in Conrad's work, as he recognized when he referred to himself as *homo duplex*. For this reason Darras goes against the view which traces Conrad's work to his Polish origins, or which sees him as a grateful, adopted Englishman. The only true origin for the author Conrad is his own writing. "Darras is a perceptive enough reader to see that while Conrad was not, and could not afford to be, an overt rebel, he is constantly diverging from what were then the existing norms of fiction writing, and that while he appears to conform to existing literary criteria he finds all kinds of subtle ways to subvert them.

Conrad spent four crucial years in France (1874–78) after he left Poland and it could be fairly said that his second "culture" was French, before his ambiguous commitment to English culture. Yet French literary criticism for the most part has dealt with Conrad. (Indeed the reason why certain English and American critics are privileged and chosen for study in advance remains a source of mystery to a suburban Anglo-Saxon reader like myself.) However, it should be said that there is a *Société Conradienne* based in Limoges (which also puts out a periodical called *L'Epoque Conradienne*). And now we have this book by Jacques Darras, a respected young French critic.

As a French critic he is of course aware of, though not provincially addicted to, the various theories and theorists which have been coming out of Paris during the last twenty years or so. This makes Darras unusually sensitive to the importance of language, writing, narrating and wording in Conrad and without recourse to arcane jargon he is able to look at Conrad's works in a fresh light. The result is one of the most original books on Conrad I have read in years. From one point of view his overarching thesis is not in itself very original: that from the start in Conrad there is a divorce between the Victorian ideal of progress and the mystique which the members of the White race, in the depths of their hearts, had promised themselves to conquer". But Darras has a subtle, unusual, thought-provoking and witty way to say about every page he writes.

One of his themes is the revaluation, at times the degradation and even perversion of the traditional romantic hero, the heroic ideal, the "quest". The romanticism of *Youth* is shown to be somewhat suspect, as is Marlow's version of Lord Jim (I think there is arguably some misreading here since it is just Marlow's endless uncertainties and tentativities about the baffling mixture of weaknesses and strengths in Jim which effectively make the book). When he turns to *Heart of Darkness* Darras makes some fascinating observations about the distorted echoes of the traditional quest:

> By going up the Congo river, Marlow follows without realizing it the itinerary of a medieval quest. All the traditional signs, all the symbolic landmarks appear along his route – but they have been tampered with. Instead of helping him on his way, they mislead him. The blunt spears, the useless books, and the savage round tables have all lost their meaning; not one of them is what it seems to be, and the conventions of the chivalric code are not respected.

This is all in line with Darras's contention that the colonial exploitation of the last century was in effect the last manifestation of all those quests whose model was originally to be found in chivalric romance.

Darras continues to pursue this theme through *Nostromo* (here he makes some elegant points about the connexions between mining, refining, and writing) and *The Secret Agent* where, as Darras sees it, the colonial dream in its final hours has retreated to the metropolis. There is not even a vestige of any kind of imperial heroism: what we have instead is "the sordid duplicity of the anonymous double agent". And, a point seldom if ever raised in discussions of the book, who or what is the *real* secret agent? It certainly isn't simply Verloc; it is something less tangible, more pervasive. Darras suggests: "is not the lucre of trade and exchanges the real secret agent, the agent/*argent* of duplication and duplicity, the true prime mover of this closed universe?" We have come a long way from the true heroism of the medieval quest.

The other major theme of the book is the increasing prevalence of "the power of writing", as Darras demonstrates in a remarkable final section on *Under Western Eyes*. The narrator of this novel is a teacher of languages, but as Darras points out he is "an uprooted person, doomed to live in exile and to suffer the amnesia of languages". He is indeed a "man of paper" from beginning to end; but then pretty nearly *everybody* is writing something in this novel, and Darras is quite correct to point to the link between the overt political matters of the book and the more covert but ubiquitous preoccupation with all kinds of writing which the novel explores, confronting us with the question – how innocent, how neutral can writing really be? We have for some time been living in a world in which genuine heroic action has been receding, while the power of writing everywhere grows. Conrad could see the importance of this connexion and in addition was one of the most self-conscious of writers, well aware of the ambiguity of his own activity. Darras contends that "perhaps no other writer has so attentively watched himself writing". Perhaps, though the name of Henry James also offers itself.

It is no doubt Darras's French training which makes him so alert to Conrad the meta-writer (writing about writing) as well as Conrad the novelist. There is after all a long tradition of studying modes of narrative and narrative discourse in France (Flaubert was one of Conrad's favourite writers) and Darras has used that tradition to excellent effect in this compact, important and unusual work.

Joseph Conrad: "homo duplex".

Conrad may have actually thrown the two pens away, but metaphorically they were always there – one pen, as it were, watching what the other was doing.

Tony Tanner

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The cult of arrogance

"The Hero of My Life": essays on Dickens
by Bert G. Hornback
Ohio University Press, £11.90
ISBN 0 8214 0587 X

Excess and Restraint in the Novels of Charles Dickens
by John Kucich
University of Georgia Press, distributed by Transatlantic Book Service, £12.67
ISBN 0 8203 05676 6

Since Dickens's greatness is now established beyond question it is inevitable that critical studies devoted to his work will continue to multiply. It is also inevitable that most of them will add nothing to an understanding of his work; this is certain the case with the two books under review.

"*The Hero of My Life*" at least has the merit of being short – 156 pages of large type – and intelligible. Its starting-point is the opening sentence of *David Copperfield*, which Hornback thinks is "one of the greatest openings in all literature", and which at one hilarious moment he offers to scan, thereby revealing a lack of understanding of Dickens's prose rhythms that may fairly be called complete. That lack is matched by others. "All the wonderful galaxy of characters who embody [the world of *David Copperfield*] are extras, really; they are in *David Copperfield* as tests for David's imagination, as exemplary substances for him to imagine and comprehend", as quarter-truth, at best; and one that is turned into near-nonsense by a style so cliché-ridden that you at once realize Hornback has no sense of how the novel actually works. "A wonderful galaxy of characters." Put the matter that way and it follows you know nothing about narrative, of how the characters present themselves, in time, to David. Besides, although it is true that David has difficulties in grasping the natures of, say, Steerforth, Dora and Heep, to call them "extras" is absurd and crass in about equal measure. *David Copperfield* is concerned with many other things than its hero's powers of imagination and comprehension, although those concerns partly come to us through him; from one point of view his more-or-less faulty vision. Sexual, social and class-relations, for example, are matters of such importance that if you miss them, as Hornback does, you miss most of what the novel is about.

It is therefore not surprising that when he comes to speak of *Our Mutual Friend* he should say that Bradley Headstone submits himself "to what the world wants of him". It isn't what the *world* wants that bothers Headstone; it's what's demanded of him by a specific kind of society. Hornback's dreary clichés suggest that poor old Headstone would have found true happiness in a hippie-style search after an authentic self. According to his account, the schoolmaster "initially suppresses and disguises his nature and personality in order to be acceptable to [the world]. In so doing, he becomes dangerously alienated." Ah, yes. Given this version, it is not surprising that Headstone's dark, dangerous sexual energy (in some respects it may well come from Dickens's thinking about Rochester and Heathcliff) counts for nothing. And any suggestion that Dickens's imagination was powerfully affected by the possibilities of evil is to be discounted.

It is true that at one touching moment Hornback solemnly warns his readers against what elsewhere he recommends. "There is a big philosophical difference between David's achievement of self – or Ann Bonar's, for that matter – and such egotistical travesties as *Zen and the Art of Motorcycle Maintenance*, and *Jonathan Livingston Seagull* or other such popular cult-of-arrogance books". There is indeed a difference, but I am fairly certain that anyone who speaks of it as Hornback does reveals only that he doesn't know what the difference is.

"*The Hero of My Life*" may find readers, because it looks as though it makes sense. Kucich's book will certainly find readers, of a kind, simply because it makes hardly any sense and bristles with most if not all of the names that one would expect to find in a critical study which begins by announcing that its author will "employ many of the propositions of post-modernism particularly . . . the general assumption that moral and intellectual assertions are fictional in origin, non-mimetic, and therefore can be shown to dissolve into contradictions or constructions under scrutiny." However, not all is lost to post-modernism, because "I remain interested in literature as an image of human satisfactions apart from epistemological projects". Our author is thus in something of a dilemma. "The very 'superiority' of Derrida and de Man, at least in literary circles, comes from their flagrant, seemingly transcendent willingness to abandon human strongholds that others – perhaps more daring – are willing to risk." (I am not sure why superiority is hedged about with inverted commas. Perhaps because it isn't real? And because those unspecified others are not so much less daring as less stupid?)

But you can see his problem, for, "superior" though they are, Derrida and de Man are not entirely helpful when it comes to "Dickens's texts as literary experiences", and this is because "the enthusiasm for dilapidation of sense in Dickens seemed to contrast strikingly with the cool detachment from the stable meaning propounded by poststructuralism." . . . what I found lacking in Derrida and de Man was precisely their unwillingness to account for the negative pleasure they themselves take in deconstruction. On a practical level, what some of us – the others? – find lacking in Derrida and de Man is the slightest understanding of what literature is about. That does not seem to trouble Kucich, however; or perhaps he dare not say so.

At all events, his book is written in a jargon-clotted prose that effectively banishes sense from whatever it is that he is supposed to be discussing. On Jaggers, for example:

> Jaggers articulates his transcendence indirectly, as an absence. To incorporate the potential for violence into the structure of a personality, Jaggers adopts a technique used by all Dickens's role-playing villains, something that Girard, in a different context, calls *askesis*. In a nonviolent way, the villain deliberately strips himself of desire, or motive, in order to occupy in the eyes of the other the transcendent space of the nonhuman – that which is beyond life and death. Jaggers himself represents his nonhumanity, his *askesis*, in a number of ways.

Jaggers is, of course, one of the most intensely human characters in *Great Expectations*; in his terrible knowledge of how society feeds off law, corrupts and is corrupted, in his bleak and pitiless understanding of how people become victims, oppressed and oppressors, he is one of the greatest imaginative inventions of English fiction. But Kucich is so bound up in his words (sorry, terminology) that he can't begin to see that. "Criticism does exist, doesn't it", Randall Jarrell despairingly asked, "for the sake of the poems, novels and plays it criticises?" To which Kucich's book returns an emphatic No.

John Lucas

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BOOKS

A social priority

Catastrophe or Cornucopia: the environment, politics and the future by Stephen Cotgrove
Wiley, £16.00 and £6.95
ISBN 0 471 10079 X and 10166 4

Despite its title and subtitle, this book is not an essay in futurology. Only in passing does it consider the evolution of political structures, or attempt to assess environmental risks or to bring scientific methods to play in thinking about the future. It is at heart a sociological study of attitudes to the environment, to political activity, and to the future.

In a review of the rise of modern environmentalism, Cotgrove argues that it provides a rhetoric which resonates with the legitimacy crises of modern capitalism, and which particularly appeals to parts of the new middle classes. Environmentalism is seen as part of a search for moral guidance of the social order, rather than its revolutionary transformation. The class interests of environmentalists cut across the major political divisions and party lines, so that they typically reject both free market regulation and material affluence as social goals.

This renders the future of environmentalism as a political movement highly unpredictable, depending as it does on the coalitions that may be forged. One such coalition might be with unionists threatened by technological unemployment. Unfortunately, the research reported here stops short of considering the recent concern with job loss associated with microelectronics, and the dramatic revival of nuclear disarmament movements. Both of these developments surely represent broader shifts in political attitudes, and their evolution may change the terms of any future coalitions among interest groups. Similarly, the rise of the new right, clearly concerned with the moralization of the social order, would have been worth relating to the tendencies outlined here; as it is, it only receives brief mention.

Much of the book is a reading of environmentalist movements and the more general debate on the future of industrial society in terms of value systems, particularly those concerning industrialism and materialism. However, it also contains a report of a questionnaire study of samples of industrialists, unionists, the general public, and members of environmentalist groups. It will come as no surprise that industrialists and environmentalists have most disagreement over social priorities. But interesting differences are also reported between new environmentalists (such as Friends of the Earth) and traditional conservationists (such as the World Wildlife Fund): the latter tend to be more right-wing, supporting economic individualism and the free market, and rejecting "post-material" values.

New and old environmentalists do have similar outlooks on environmental danger, although they differ in levels of concern with resource shortages. But the new activists see real and threatened environmental crises as just one of a set of fundamental problems in industrial societies as we know them, and operate through unconventional social movements to promote desired change. Cotgrove argues that they draw largely on a distinct fraction of the professional middle class (or those aspiring to join it). And while they share many of the goals of trade union officials, they differ from unionists in agreeing with the dominant view that there is a contradiction between material and non-material goals. Unionists believe that both goals can be given priority; the new environmentalists emphasize participation, decentralization and the like, as both limiting and directing economic growth.

In essence, then, Cotgrove is aiming to chart, and identify the social foundations of, the value system of the new political ecology. The general direction of his conclusions, summarized above – that the new environmentalists typically share distinct social locations, interests and values – is convincing, and corresponds to the results of other studies. But the reader is left wondering what experiences have led to the choice of particular political strategies, and why the environment should be the issue (at least prior to the revival of peace movements) around which their concerns crystallize. Perhaps Mary Douglas's or Jurgen Habermas's new research will provide some clue to the answers here.

These questions are never clearly addressed or answered in *Catastrophe or Cornucopia*. One reason for this is, paradoxically, a virtue of the book: in setting out to be a balanced and wide-ranging survey of relevant literature, Cotgrove often does a better job of summarizing other investigations than in arguing his own position. This makes it a useful text for seminars, but anyone expecting to learn whether or not there is reason to be alarmed about environmental trends had better turn to the *Global 2000 Report* (Penguin, 1982), for they will find little to help them reach a conclusion here. Environmental threat is not just a matter of social perceptions. There is certainly material enough in this volume to demonstrate the importance of unravelling the different strands of the attitudes and perceptions about these trends, not least in judging the ideological matrix of *Global 2000* and its kin. But if it is the action and experience, rather than the mere existence, of different social groups that gives rise to the environmental complex, then there are more questions raised than answers provided about the meaning of the environment and environmentalism for our future.

Ian Miles

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Divine fiat

The Intelligible Universe: a cosmological argument by Hugo A. Meynell
Macmillan, £15.00
ISBN 0 333 28102 0

The main argument of this book is that the intelligibility of the world, which both common sense and the natural sciences presuppose, makes the explanatory postulate of God a rational and acceptable one. It has been fashionable for some years for philosophers to say that the arguments for God can be seen not to work. And it has been fairly common to assume that scientific method, as well as many particular conclusions in the sciences, have been unsympathetic to theistic belief. It is not only that Adam and Eve are scientifically highly improbable. It has rather been assumed that God simply has no place in the sorts of explanation of the Universe which scientists provide. He becomes superfluous, as well as poorly (if at all) evidenced.

Against this background of widespread assumptions, Meynell boldly calls upon scientific method as his chief ally in erecting a new formulation of a cosmological argument for God. He argues that the sciences presuppose a view of the world which really is at odds with the standard empiricism of British philosophy. Scientists, particularly physicists, do not in practice assume that the only real things are objects of "actual experience". What they assume is that "the real is what is to be intelligently conceived and reasonably affirmed as the explanation of what is available to experience".

In devoting some time to drawing out what he means by this, Meynell emphasizes the vital place of conjecture and explanatory postulates, and the need for judgment and reason to play a constructive part in building up a picture of the "real world". He is a scientific realist. He thinks the world the physicists talk about is (or at least is meant to be) the real one; and this, he claims, undermines empiricism. Furthermore, he argues, for the scientific world-view, there "cannot be brute facts. A putative fact which turns out to be incapable of being fitted into any framework of explanation is not a fact at all".

On the basis of this view of reality as an intelligible order, within which everything has an adequate explanation, Meynell suggests that the best overall explanation for a world of such a nature is that it is due to the *fiat* of some self-explanatory mind, that is, God. If the world is to be wholly explicable, there must finally be a self-explanatory being. Only God, suggests Meynell, is such a being; for he is not a whole of parts. He is unchangeable and not dependent upon anything else. Therefore, he alone is not susceptible of further causal explanation.

Meynell deals briefly, but convincingly, with the standard objections to cosmological arguments. Although he is right that his view does not fall to them, there are two main points of hesitation about the case he presents. First, is it true that the world is "nothing more or less than what conscious subjects tend progressively to come to know"? Although Meynell stoutly defends the objectivity and non-relativity of truth against Kuhn and Feyerabend, I am not quite so sure that the world is so necessarily structured to the demands of reason.

Second, in what sense is God a complete explanation? Do his choices and plans not need explaining? And why is he *incapable* of being dependent on anything else? I do not find this fully or quite convincingly spelled out. Is it a logical incapacity? Or just a contingent one (in which case it may well not be so)? In this area, however, one may not expect all doubts and hesitations to be cleared away.

Meynell has opened up the notion of an ultimate explanation for the world in an interesting way, and his discussion of the grounds of knowledge is basically convincing. That the sciences show the universe to be intelligible; and that this shows the universe to be in some sense mind-dependent – these propositions are argued clearly and persuasively enough to make this book of great interest, especially to those concerned with the relation of religion and science.

Keith Ward

Keith Ward is dean and chaplain of Trinity Hall, Cambridge, and a university assistant lecturer in divinity.

Lagrangian methods

Energy Methods in Electromagnetism by Percy Hammond
Clarendon Press: Oxford University Press, £18.00
ISBN 0 19 859328 7

Electromagnetism holds a central position in applied science and engineering. The electrical engineer, for example, is concerned with the transfer and utilization of energy in the form of electricity. Whether this energy transfer takes place along solid conductors, in guided wave structures, or propagates through the air as radio waves, the basic laws of electromagnetism are still applicable. The utilization of electrical energy, more often than not, results in mechanical work being done. It will be no surprise, therefore, that the opening chapter of Professor Hammond's book is entitled "Electromagnetism and mechanics". Indeed much of the text is directed towards widening our understanding of the basic unity that exists within mechanical and electromagnetic systems.

After a brief and informative history, the first chapter ends with a review of the fundamentals of electromagnetism. This review is necessarily brief, for the text assumes a reasonable background of study of electricity and magnetism. The main theme of the text is fully developed in the next two chapters, the first of which follows closely the work of C. Lanczos in developing variational methods as applied to distributed mechanical systems. It is here that Professor Hammond introduces the important concept of "action", and Hamilton's principle.

He also shows clearly the elegance of the method of Lagrange multipliers in imposing constraints upon mechanical systems. This section is beautifully discursive but was marred, I thought, by the somewhat imprecise use of the word "duality". It is important to mention this because the dual of a vector space (essentially the author is using the methods of functional analysis and vector spaces) is something quite different to that implied by the usage here. Indeed on several occasions in the text this confusion between mathematical and physical duality occurs, which is a pity since it tends to deflect the reader for a time.

The transposition from mechanical systems to electromagnetic systems is skilfully handled, the variational parameters of one system, namely the generalized coordinates, velocity and momenta, becoming the field vectors of the other, and the time differentials of the mechanical system transcribing to the space operators of vector fields. This allows "energy-like" functionals to be formulated for electromagnetic systems. The author further develops the notion that since alternative functionals can be derived for a given system, and it is possible to ensure that these alternative forms exhibit convexity or concavity, then error bounds to the solution of a given problem should be obtainable. The development of these alternative formulations is lucidly presented for electrostatic and magnetostatic systems, but the extensions to electrodynamical systems is not straightforward. Many readers will find the sections on time-varying fields and electromagnetic waves difficult, particularly when reference is made to adjoint systems having negative time sequences.

The reader could easily progress to chapter five (omitting chapter four), without losing continuity, for it is here that the author illustrates, by example, the methods discussed in the earlier section. Error bounds on field-dependent parameters such as capacitance and inductance are calculated for a range of problems, whereby the author shows the inherent insensitivity of such parameters to fairly gross assumptions about the form of the field itself. The chapter finishes with the application of the techniques to the calculation of resistance in time-varying field problems.

This chapter illustrates both the value and limitations of direct variational formulation of field problems. On the one hand the accuracy that can be achieved for a given problem, with minimal computational effort, is impressive; on the other, the method is restricted to relatively elementary geometrical configurations. Perhaps a wider discussion on the implications for the numerical analyst of such techniques would have been appropriate, although Professor Hammond does touch on this point, briefly, in the final chapter of his book.

Chapters four and six are somewhat different in flavour to the rest of the text. The first is a most readable account of some of the commonly used energy theorems of electromagnetism, namely those of Green, Thomson, Poynting and Earnshaw. In this attempt to reinforce our understanding of energy in electromagnetism and to provide physical meaning, the author succeeds well. The interaction between electrical and mechanical systems is introduced in the latter of these two chapters, but the treatment is necessarily brief.

It is likely that many readers among the electrical engineering community, at whom this book is aimed, will find this a difficult text, because of a lack of familiarity with Lagrangian methods. Complementary and dual energy principles have been extensively explored by civil and mechanical engineers but these concepts are only now receiving the attention of electrical engineers. Such methods could have a lot to offer. If this is the case, then this well-written book will provide impetus to others who wish to research in this field.

James Penman

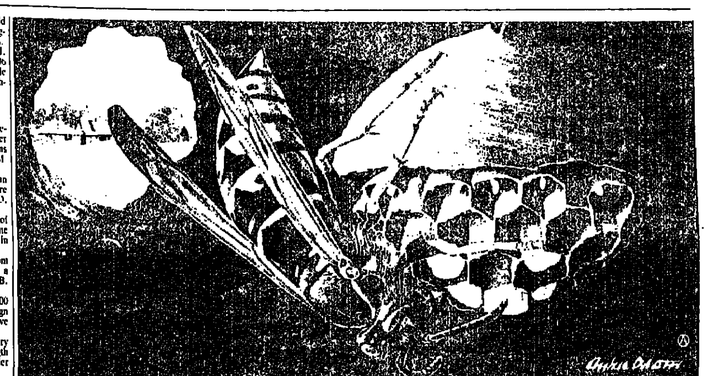
James Penman is senior lecturer in electrical engineering at the University of Aberdeen.

Harvey demonstrates to Charles I his theory of the circulation of the blood, from a painting by Robert Hannah in the Mansell Collection. Illustration taken from The Circulation of Blood: a history by Helen Rapson, published by Frederick Muller at £7.95.

Volume two of Niels Bohr's Collected Works; work on atomic physics 1912–1917, edited by Ulrich Hoyer, has been published by North Holland at Dfl. 275. The published papers, and the extensive collection of manuscript material and correspondence, cover the period during which Bohr combined Rutherford's discovery of the atomic nucleus with the quantum of action to develop a theory of the constitution of atoms and molecules based on the concepts, foreign to classical electrodynamics, of stationary, non-radiating, states of an atomic system and of radiative transitions between such states.

NOTICE BOARD

Noticeboard is compiled by Patricia Santinelli and Mila Goldie



The Wasps' Nest, a gouache by Anker Odum is included in an exhibition of Canadian Nature Art at the Natural History Museum until August 14. Birds, wolves, racoons and even fishes appear in the varied exhibition of 28 prints, drawings and paintings. It is organized by the Canadian National Museum of Natural Sciences and the Canadian Nature Federation.

Grants

Universities

Bath
School of Architecture and Building Engineering – Professor E. Happold and Dr D. J. Croome £7,500 from the Department of Health and Social Security for the development of an energy conservation model related to health requirements.
School of Biological Sciences – Dr E. H. Holman – £34,518 from the MRC for a study of unsaturated reserves of insulin-sensitive sugar transporter in adipocytes.
School of Materials Science – Dr V. D. Scott – £18,720 from the Ministry of Defence for an investigation of the microstructure and mechanical properties of a high strength cast aluminium alloy.
School of Mathematics – Dr B. W. Silverman, Professor R. Sibson and Dr A. Robinson – £7,500 from the SERC for research into statistical methods for data smoothing.

Essex
Biology – Dr S. P. Long and Dr N. R. Baker – £9,500 from British Petroleum for an analysis of limitations to photosynthetic efficiency in higher plants.
Physics – Mr T. P. Hughes – £53,235 from the SERC for a study of laser plasma interactions in well characterized subcritical density plasmas.
Electrical Engineering Science – Dr D. J. Dennis – £9,392 from the SERC for an investigation into multi-spectral imaging for real time defect detection; Professor G. B. B. Chaplin – £17,238 from the SERC for an actuator for cancelling very low frequency acoustic noise – a feasibility study.
Chemistry – Professor R. J. Cherry – £7,703 from the SERC for research into rotational mobility of membrane proteins.
Economics – Professor G. M. Heal, Professor G. Chichilnisky and Dr D. Mayston – £36,111 from the SSRC for an investigation into public policy in a mixed economy with increasing returns to scale.

Lancaster
Biological Sciences – Dr J. A. Nieduszynski – £26,537 from the MRC for investigation of the interactions and role of cytoskeletal link proteins.
Chemistry – Dr P. Hodge – £24,490 from the SERC for work on polymer-supported asymmetric synthesis.
Cumbria and Lancashire Archaeological Unit – £25,451.60 from the Department of the Environment for excavations at Walton-le-Dale, near Preston, 1982/83.
Environmental Sciences – Dr R. M. Harrison – £25,550 from the SERC for investigation of pollutant pathways of alkyl lead compounds.
History and Independent Studies – Dr K. Smith and Dr B. E. Wynne – £26,610 from the SERC for investigation of technical/scientific social and industrial decisions and legal frameworks.
Physics – Professor A. B. Clegg and Dr F. Foster – £171,571 from the SERC for work on elementary particle physics; Dr A. M. Guenault and Dr G. R. Pickett – £132,495 from the SERC for investigation of properties of helium-3 and dilute 3He-4He solutions at sub-millikelvin temperatures, Professor R. H. Tredgold – £25,861 from the SERC for work on Langmuir-Blodgett films using polymeric materials.
Physics and Environmental Sciences – Dr M. J. Lacasse and Dr J. F. R. McIlveen – £38,906 from the SERC for investigation of middle atmosphere water vapour and ozone using higher frequency millimetre wave oscillators.

Leeds
Computer Studies – £20,916 from Shell Research Limited for the production of computer software for the numerical solutions of systems of partial differential equations, under Dr P. M. Dew.
Earth Sciences – £32,987 from the NERC for an investigation of seismicity and seismic structure of the Cameroon volcanic line, under Dr J. D. Fairhead.
Genetics – £44,148 from the MRC for a study of sequences and control mechanisms of gene complexes determining glutamate synthesis in bacteria, under Dr J. C. Wootton.
Plant and Applied Zoology – £21,428 from NERC for an investigation of competition on a divided and ephemeral resource, under Dr B. Shorrocks.
Electrical and Electronic Engineering – £25,200 from Micro Metalsmiths Limited for the design and realization of components for microwave integrated circuits, under Dr M. J. Howes.
Textile Industries – £12,515 from the Ministry of Defence for an investigation of strength structure relationships in carbon fibres, under Dr D. J. Johnson.
Institute for Transport Studies – £13,005 from the Transport and Road Research Laboratory for a study of rail travel and the level of economic activity, under Dr C. A. Nash.
Biochemistry – £17,711 from the ARC for an investigation of the regulation of photophosphorylation by the adenosine triphosphate inhibitor protein of chloroplasts, under Dr D. A. Harris.

Warwick
Chemistry and Molecular Sciences – Dr Q. H. Dodd – £18,000 (supplementary) from RAM Limited, for research on Chemical modification studies on the olefactory code. Dr O. W. Howarth – £26,929 from the SERC for research on NMR of Polyoxoanions and related species. Professor K. R. Jennings – £52,621 from the SERC for research on angle and energy resolved mass spectrometry.
Engineering – Professor S. K. Battacharyya – £106,400 from the SERC/Department of Industry and BL Cars Limited, for teaching company programme with BL Cars Limited (LMC).
Environmental Sciences – Professor D. P. Kelly – £21,218 (supplementary) from Biogen for insect leaf-mining of minerals.
Institute for Employment Research – Dr R. M. Lindley – £181, 595 from the MSC as part of a rolling forward programme extending to 30th September 1986 for the Manpower Research Group.
Mathematics – Professor D. B. A. Epstein – £45,00 from the SERC for hyperbolic geometry and 3-dimensional manifolds.
Physics – Professor P. W. McMillan – £50,000 (supplementary) from the British Technology Group, for membrane for reverse osmosis.
Sociology – Ms C. M. Davies – £64,050 from the SSRC for a study of equal opportunities for women in the NHS.

Chairs

Dr John Wyn Burrow, reader on history and intellectual history at the University of Sussex, has been promoted to a professorship at the University of Sussex, from October 1, 1982.
Mr John R. Saloman has been appointed to the first chair in transplant surgery in the U.K. on a personal basis by the University of Wales. He has been assistant director of the KRUF Institute of Renal Disease and reader in transplant surgery in the Welsh National School of Medicine since 1975.

Recent publication

Training Activities for Teachers in Higher Education edited by Pat Cryer is the first volume in a series designed specifically to meet the needs of all those who are concerned with academic staff training and development and who are timing activities such as workshops, games simulations and structured exercises. It is the work of a working group set up by the Society for Research into Higher Education. Available from SRHE, University of Surrey, Guildford, Surrey, £15.)

News

Newcastle University has established its first sports scholarship which will be named after Callers-Pegasus Travel Service Ltd, a Newcastle firm which is funding it. The scholarship is to be offered to a student resident in the north who has the potential to represent Great Britain in his or her chosen sport. The selected student would enter the university in October 1983 and would be able to extend a normal first degree course by one year to take part in high level sporting activities.

* * *

A chance for local people to obtain a law degree through part-time study is being provided by the North East London Polytechnic at its Barking site from this autumn. The five year part-time course is aimed particularly at mature students who for instance are looking for a degree qualification to improve their career prospects in area related to law or who are thinking of a change in career direction. Details from the Law Department, NELP, Barking-Precinct, Longbridge Road, Dagenham.

* * *

The Joseph Rowntree Trust has appointed a new expert group to advise it on mental handicap. The group which has an initial life of two years has been drawn from researchers, practitioners, administration, the voluntary sector and parents. Its secretary is Mr Malcolm Johnson, senior fellow at the Policy Studies Institute, London, who is also the trust's adviser on mental handicap. Other members include: Mr Hugh Barr, assistant director of the Central Council for Education and Training in Social Work, Professor Joan Bicknell, department of psychiatry, St. George's Hospital Medical School; Professor Jonathan Bradshaw, Social Policy Research Unit, York University; Dr Chris Kiernan, deputy director Thomas Coram Research Unit, Institute of Education; Dr Oliver Russell, senior lecturer, department of mental health, Bristol University.

* * *

Mental Health and Illness, educational materials suited at fifth and sixth formers as well as further education students are available from Christine Wood, Westminster Association for Mental Health, Church House Newton Road, London W2, £4 plus 62p for postage

Open University programmes July 24 to July 30

Saturday July 24

BBC1
6.25 Contemporary issues in education. Adult literacy: the Cape Verde Experience II (R+30), prog 11
6.50 An ageing population. Rehabilitation (P252, prog 8)
7.15 Italy 1381–1500: Fountain and profile: the Medici gardens (A352, prog 9)
World Politics. The rise and fall of Britain's trade. Pulley 4: the nature of conflict (T233, prog 8)
Ethnic minorities and community relations. To Bedford (from House 1, Sold to England (E356, prog 5)
8.35 Art and environment: Political Film. *The Nightcomers* (TAD292, prog 9)

BBC2
6.20* Greece 478–336 BC. Land and Sea (A292, prog 10)
6.40 An introduction to calculus. Taylor Polynomials (MS583, prog 11)
7.15* Introduction to pure mathematics. In Perspective (M203; prog 21)
7.40 The development of instruments and their music. Romantic Recital (AA304; prog 11)
8.05 Technology foundation course. First in the Field
8.50* Arts foundation course. Harris Tweed (A101; prog 3)
9.20 Cognitive development: language and thinking from birth to adolescence. Ways of Studying Children (E362; prog 5)
9.45 Risk. *Brandon* by Alan Plater (U201; prog 8)
10.10* Mass communication and society. Also Starring ... (DE353; prog 10)
10.30* Organic chemistry. Organic Chemistry – Azobenzene (S346; prog 10)
Science and belief: from Darwin to Einstein. Scientists remember Germany 1918–1945 (R351, prog 7)
Mathematical models and methods. Differential Equations (MST204; prog 22)
11.25 Options.
11.50 An introduction to psychology. Similarities and Differences (DD262; prog 5)
12.10 Open Forum (R). Prince Charles visits Watson
12.40 Material engineering: an introduction. A Cut Above (T252, prog 8)
13.00* Sociality and learning. Self-Concept (E201; prog 11)
13.20 No OU programme.
14.20* Reading development. A Matter of Form? (PE231; prog 5)
14.40* The handicapped person in the community. Like Other People (P251; prog 5)
Introductory electronics. Digital Systems (T263; prog 8)

BBC2 (VHF)
1.00* Biochemistry and molecular biology. Folic Acid Antagonists. The Theory and Application of Industrial relations. The Private Sector (PT281, prog 8)
4.30* Decision making in Britain. Government and Industry 1977 (D203, prog 27)
6.00 Materials under stress: Stress Corrosion (T351; prog 6)
7.15* Arts Foundation Course. Pastoral and Anti-Pastoral (A101: prog 21)
7.30 Science foundation course. An Evolutionary Paradox (S101; prog 10)
22.20 Arts Foundation Course.
23.40* Partial differential equations of applied mathematics: Convergence (M221; prog 6)
24.00 Elements of music. Harmonic Analysis (3) (A241; prog 11)
00.20* Mathematics and applied calculus. Revision (MST282; prog 5)

Sunday July 25

BBC1
6.25 History of Architecture and Design, 1890–1939: Word or Metal? English Furniture of the Thirties (A305; prog 10)
6.50 Mathematical Quest. The Mosque: Prayer in It's Setting (AD206; prog 5)
7.15 Systems Modelling. I'll Tell You Where To Put Your Airport (T341; prog 5)
7.40 Urban Change and Conflict. People into Politics (R322; prog 5)
8.30 Microeconomics. The Gulbenkian Thesis (U222; prog 5)

BBC2
6.55* Images and Information: Viewing the Invisible (S278; prog 8)
8.50 Graphs, Network and Design. Transportation Algorithms (TM361; prog 11)
9.15 Geology. Climates of the Past (S223; prog 11)
9.40 The Nature of Chemistry. The G.C./M.S. Link-Up (S304; prog 5)
10.05 Biochemistry and Molecular Biology. Chromatin (S322; prog 11)
10.30* Science Foundation Course. Dawn of Man (S101; prog 20)
10.55 Social Science Foundation Course. Not the Done Thing (D101; prog 22)
11.20 Maths Foundation Course. Transformations and Matrices (M101; prog 10)
11.45 Man-made futures: design and technology. Designing for the disabled (T262; prog 8)
12.10* Materials Processing. Pressure Die Casting (T352; prog 8)
12.35 Control of Technology. Alternative Technology Centre (T361; prog 6)
13.00 Biology Form and Function. Osmoregulation in Animals (S202, prog 22)
13.25 Computing and Computers. Computing: Systems Analysis and Design (M252; prog 11)
13.50 Oceanography. Shoreline Processes (S334; prog 11)
14.15 Research methods in Education and the Social Sciences. Drawing Conclusions (DE304, prog 4)
14.40 Physiology of Cells and Organisms. Photosynthesis and the Mysmetrium (S321; prog 11)
15.05 Inorganic Chemistry: concepts and case studies. Inorganics and the Lithium Row (S247; prog 8)
15.30* Discovering Physics. Gaseous Diffusion (S371, prog 13)

BBC2 (VHF)
8.55 The Council of Education in British Schools
9.15 Control: Order or chance (E222; prog 7)
9.35* Seventeenth Century England: a changing Culture 1618–1689 Portraiture: Part 2 (A303; prog 11)
9.55* Science and Belief: From Darwin to Einstein. Primitive Life from the Deep. (A381; prog 11)
10.20* Personality and learning. Self Concept (E201, prog 21)
10.45 Social Science Foundation Course: Magazine programme 5 (D102; prog 11)
11.10 Technology foundation course. After the Harvest (T101, prog 13)
11.35 Management and the School: Liaison, A Hospital School. (U332; prog 5)
12.00 Rome: The Augustan Age: Augustus and the people of Rome. (A293; prog 12)
12.25 Urban change and Conflict. Class Reproduction. An Interview with Basil Bernstein. (R302; prog 11)
12.50 History of Mathematics: Development of Fractions. (AM289; prog 8)

RADIO 4 (VHF)
8.55* Ethnic minorities and community relations: Key Issues in British Race Relations (E354; prog 1)
7.15* Social Work Community Work and Society: Community Paradise (DE206, prog 7)
7.35 The Enlightenment: The Classical Orchestra (A204; prog 22)

Monday July 26

BBC1
6.40 The Enlightenment. The Marriage of Figaro (A294; prog 11)
7.05 Mathematical models and methods Modelling Game 3 (MST204; prog 16)
7.30 The nineteenth century novel and its legacy: Gernhut (A312; prog 11)

BBC2
5.40* Maths foundation course: Transformation and Matrices (M101; prog 10)
7.05* Technology Foundation course: First in the Field (T101; prog 13)
7.30 Computing and Computers. Computing: Operating Systems. (M252; prog 10)
8.10* Contemporary Issues in education: Adult Literacy. The Cape Verde Experience. II (E206; prog 12)

RADIO 3 (VHF)
8.55 Research methods in education and the social sciences: The nature of social science concepts (DE304, prog 8)
6.15* Mass Religious Quest: A Muslim Testimony (AD206; prog 16)
23.20 Arts foundation course: The Royal Academy Exhibition 1829 (A101; prog 22)
23.40* Technology foundation course. After the Harvest (T101, prog 13)
24.00 Risk: Risk and the Law Continued (D101, prog 8)
12.20* Social psychology: Analysing the Analyses (D305; prog 11)

RADIO 4 (VHF)
23.35 The role of modernism in music. Music Between the Wars (A398; prog 11)

Tuesday July 27

BBC1
5.40 Seventeenth century England: A Changing culture 1618–1689 Peace is Corrupt (A303; prog 11)
7.05 Social needs in education: All Down Hooey (E241; prog 8)
7.30 Food production systems: The Kenyan Small Farmer (T272; prog 6)

BBC2
6.40 Instrumentalism: Signals and noise (T291, prog 8)
7.05 Science foundation course: Rabbits and chalk grassland (S101, prog 21)
7.15 Language development: Discourse Analysis (P232; prog 7)
23.20 Management and the School: Liaison, A Hospital School. (U332; prog 5)
23.40* Rome: The Augustan Age: Augustus and the people of Rome. (A293; prog 12)
24.00 Urban change and Conflict. Class Reproduction. An Interview with Basil Bernstein. (R302; prog 11)
12.40 History of Mathematics: Development of Fractions. (AM289; prog 8)

RADIO 4 (VHF)
8.55* Ethnic minorities and community relations: Key Issues in British Race Relations (E354; prog 1)
7.15* Social Work Community Work and Society: Community Paradise (DE206, prog 7)
7.35 The Enlightenment: The Classical Orchestra (A204; prog 22)
23.40* Art and environment: Words on water (TAD292; prog 11)
24.00 History of architecture and design 1890–1939: The labour saving home. (A305, prog 20)
00.20 Social work, community work and society. Job Creation (DE306; prog 11)

RADIO 4 (VHF)
23.30 Complex analysis: The calculus of residues (MA352, prog 8)
23.50 Genetics. The biometrical approach (S299, prog 11)

Wednesday July 28

BBC1
6.40* Oceanography Shoreline Processes (S334, prog 11)
7.05 Evolution: Islands within islands within islands (S364, prog 11)
7.30 Biology Brain and Behaviour Mechanisms of pain relief (SE268; prog 11)

BBC2
6.40 Introduction to pure mathematics. A non-Euclidean World (M203; prog 22)
7.05 Arts foundation course: Constable and Turner (A101; prog 22)
7.30 Inquiry 3: Village of all the Talents (D202, prog 9)
00.30 The Pre-school Child; All in a days work (P012, prog 2)
6.55 Geology in the home: Building for the future (PST102, prog 4)
17.10* Art in Italy 1480–1540: Fountain and Grotto, The Medici Gardens (A 352, prog 9)

RADIO 3 (VHF)
6.55* Principles of chemical processes: Rates of instantaneous reactions (ST294, prog 4)
6.15* The rise of modernism in music. Music between the wars (A398; prog 12)
23.20* Social Sciences foundation course. Magazine programme 5 (D102, prog 11)
23.40 Reading development: Catchwords (PE231; prog 6)
24.00 Economics and education policy: Government strategy and local expenditure (ED322, prog 8)
00.20 Technology foundation course. After the Harvest (T101, prog 13)
00.40* The Enlightenment: The Classical Orchestra (A204 prog 22)

RADIO 4 (VHF)
23.30* Seventeenth century England: a changing culture, 1618–1689: Portraiture, Part 2 (A303; prog 11)
23.50 Personality and learning: Why cross-cultural studies? (E201; prog 5)

Thursday July 29

BBC1
6.40* An introduction to psychology: Similarities and differences (DD262; prog 5)
17.10* An ageing population: Rehabilitation (P252, prog 8)

RADIO 3 (VHF)
6.55* Elements of music. Harmonic analysis. (3) (A241; prog 11)
6.15* Management and the school: Liaison; A hospital school (E234; prog 5)
6.35 Thought and reality: central themes in Wittgenstein's philosophy: Reading "The Philosophical Investigations". (A462; prog 12)
23.20* Environmental control and public health: Dumping Waste – The legal base (PT272, prog 12)
23.40* Art and environment: Words on water (TAD292; prog 11)
24.00 History of architecture and design 1890–1939: The labour saving home. (A305, prog 20)
00.20 Social work, community work and society: Job Creation (DE306; prog 11)

RADIO 4 (VHF)
23.30 Complex analysis: The calculus of residues (MA352, prog 8)
23.40* Materials under stress: Stress corrosion (T351, prog 6)
24.00* Schooling and society. Class reproduction, an interview with Basil Bernstein (ED2C, prog 11)
00.20 Mass Religious Quest: A Muslim Testimony (AD206; prog 17)
00.40 Decision Making in Britain. The Road to Gosforth (D303; prog 12)

RADIO 4 (VHF)
23.30 World Politics: The Rise and Fall of Britain's Trade (T233, prog 8)
23.40* Materials under stress: Stress corrosion (T351, prog 6)
24.00* Schooling and society. Class reproduction, an interview with Basil Bernstein (ED2C, prog 11)
00.20 Mass Religious Quest: A Muslim Testimony (AD206; prog 17)
00.40 Decision Making in Britain. The Road to Gosforth (D303; prog 12)

Friday July 30

BBC1
6.40* Urban change and conflict. People into Politics (D202; prog 6)
7.05 World Politics: The Rise and Fall of Britain's Trade (T233, prog 8; The Nature of Conflict (D233, prog 8)

BBC2
6.40* Biology Form and Function. Osmoregulation in Anthropods. (S202; prog 22)
7.05* Earth Sciences: Climates of the Past (S223, prog 11)
7.30 Materials Engineering: An introduction: A Cut Above (T252; prog 8)
24.00* Social Sciences foundation course. Magazine programme 5 (D102, prog 11)
23.40 Reading development: Catchwords (PE231; prog 6)
00.25* Man's Religious Quest: The Mosque: Prayer in its Setting (AD204, prog 5)

RADIO 3 (VHF)
6.55* Economics and Education Policy: Government Strategy and Local Expenditure (ED322, prog 8)
6.15* Instrumentation: Signal Verifiers (T291, prog 6)
6.35* History of Mathematics: Development of fractions (AM289, prog 8)
23.40* The Control of Education in Britain: School Control: Order or Chance (E222, prog 7)
24.00* Complex analysis: The Calculus of Residues (MA352, prog 8)
00.20* An introduction to Calculus: Taylor Series (MS583, prog 6)
00.40* History of Architecture and Design 1890–1939: The 7 hour Saving House (A305; prog 20)

*repeated programmes

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RHODES UNIVERSITY
Grahamstown, South Africa

Applications are invited for the following posts:
PROFESSOR OF EXPLORATION GEOLOGY (from 1/1/83)
SENIOR LECTURER/LECTURER IN BIOCHEMISTRY (from 1/1/83)
SENIOR LECTURER/LECTURER IN COMPUTER SCIENCE (from as soon as possible)
SENIOR LECTURER/LECTURER IN PHARMACY (from as soon as possible)
LECTURER/JUNIOR LECTURER IN BUSINESS DATA PROCESSING (from 1/1/83)*
LECTURER/JUNIOR LECTURER IN GEOGRAPHY (from 1/1/83) (with research interests in Climatology/Meteorology or Bio-Geography)
LECTURER/JUNIOR LECTURER IN JOURNALISM (from 1/1/83)
LECTURER/JUNIOR LECTURER IN PHYSICAL EDUCATION (to teach female students) (from 1/1/83)
LECTURER/JUNIOR LECTURER IN LINGUISTICS (temporary post for one year in 1983)

The salary scales are:

PROFESSOR	R23,109 × 936–24,045 × 1,035–30,255 per annum
SENIOR LECTURER	R16,557 × 936–24,045 per annum
LECTURER	R12,657 × 780–16,557 × 936–22,173 per annum
JUNIOR LECTURER	R9,075 × 621–10,317 ×780–14,217 per annum

(NOTE: £1 sterling = approximately R1.95).

The initial salary in each case will be determined according to qualifications and experience. Fringe benefits include generous leave privileges, financial assistance towards the University education of children at Rhodes University, a housing subsidy scheme and a service bonus according to regulations. The successful applicants for permanent posts will become members of the University's pension and medical aid schemes.

*The post of Lecturer/Junior Lecturer in Business Data Processing will be attached to the University's East London Division.

Application forms and further particulars may be obtained from the South African Universities Liaison Officer, 27a Wellington House, 272 Upper Richmond Road West, London SW14 7HE. One copy of the application should be returned to the South African Universities Office and one copy forwarded direct to the Director of Personnel, Rhodes University, P.O. Box 94, Grahamstown, South Africa by not later than 20 August, 1982.

KING SAUD UNIVERSITY
SAUDI ARABIA

QASSIM COLLEGE OF AGRICULTURE

Teaching/research vacancies exist in the new Qassim College of Agriculture of King Saud University, in the following fields:

1. **TEACHING PRE-REQUISITE COURSES:**
   Chemistry, Organics, Physics, Biology, Mathematics, Islamic Cultures, and Arabic Literature.
2. **TEACHING POSTS IN:**
   a. Animal Production
      Sheep, Cattle, Poultry in relation to breeding.
   b. Plant Production
      Genetics and plant breeding, Cytogenetics, Plant Nutrition Genetics.
   c. Plant Protection
      Herbicides, Fungicides, Insecticides.
   d. Agriculture Extension
      Rural Development.
   e. Veterinary Sciences
      Specialization in Tropical Disease.
   f. Agricultural Chemistry
      Relevant to Food Technology.

Benefits include free accommodation and medical facilities, tax free salary and yearly round trip tickets for yourself and your family.

Applicants, preferably Arabic speaking Ph.D. holders with at least three years experience, should send a c.v. (including address and telephone number) together with copies of academic/experience certificates to:

The Dean, Qassim College of Agriculture
Qassim Branch of King Saud University
Burydah, PO Box 1482
Riyadh, Saudi Arabia

Selected candidates will be advised of interview arrangements.

PAPUA NEW GUINEA
THE UNIVERSITY OF TECHNOLOGY
DEPARTMENT OF LANGUAGE AND SOCIAL SCIENCE

LECTURER/SENIOR LECTURER
ENGLISH FOR SPECIFIC PURPOSES

Applications are invited for this post which involves teaching the language skills needed by students in the University's professional courses. Applicants should possess a relevant first degree and postgraduate qualifications. Experience in teaching E.S.P., English for Science and Technology and for business communications at the tertiary level is highly desirable. Experience in materials development would be an advantage.

Salary: Lecturer K14,980 – K19,830; Senior Lecturer, K19,830 (K1 = Stg 0.7668 approx.)

Initial contract period is for 3 years. Other benefits include a gratuity of 34% taxed at 5%, appointment and repatriation fares, leave fares for the staff member and family after 18 months of service, settling-in and out allowances, 12 days paid leave per year, education fares and assistance towards school fees, free housing, contributory pension and medical benefits schemes are available.

Detailed applications (five copies) with curriculum vitae together with names and addresses of three referees should be received by: The Registrar, The University of Technology, Private Mail Bag, Papua New Guinea by 14 August 1982. Applicants resident in the United Kingdom should also send one copy to the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF. H1

LONDON
IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF MATHEMATICS

Lecturer(s) in Numerical Analysis

This new position has been approved by the Council of SERC. Special Replacement and Improvement of Equipment funds for the first three years. Commencement date negotiable after which time the position will form part of the normal financial responsibilities of the Department of Mathematics at Imperial College.

Applications are invited from those qualified in numerical analysis to a degree or equivalent qualification, with interests in either theoretical or applied numerical analysis. The salary will be in the range £7139–£13885 (under review) and the appointment will date from 1 October 1982 or as soon as possible thereafter. It will be subject to the usual regulations relating to lectureship appointments at Imperial College.

Further particulars can be obtained from Professor D. E. H. Reuter, Department of Mathematics, Imperial College, London SW7 2BZ (tel. 01-589 5111 ext 5934) to whom formal applications should be sent by Monday 23 August 1982. H1

DURHAM
UNIVERSITY OF
MATFEN PRINCIPAL OF NEWCASTLE COLLEGE

Applications are invited for the post of Matfen Principal of Newcastle College from 1 September 1983 or such later date as may be arranged, in succession to Mr. Frank Matfen on the retirement of the latter.

The appointment will be made on the Professorial scale (£14,013 – £16,218 per annum). In general, with unexpired pensionable service, the Matfen Principal is required to live in a College house.

Applications (five copies) together with the names and addresses of three referees, should be submitted not later than 1 September, 1982 to the Registrary, The Palace, Old Elvet, Durham DH1 3RT from whom further particulars may be obtained. H1

NEW ZEALAND
UNIVERSITY OF CANTERBURY
SENIOR LECTURERS OR LECTURERS IN ACCOUNTANCY

Applications are invited for three positions of Senior Lecturer or Lecturer in the Department of Accountancy from persons capable of teaching courses and conducting research in one, or more of the following fields: Auditing, Business Finance, the application of Computer Systems to Business, Financial Accounting, Management Accounting, Public Sector Accounting, Taxation.

The salary for Senior Lecturer is on a scale from NZ$27,088 to $30,193 (bar), to NZ$34,387 per annum and for Lecturers on a scale from NZ$21,666 to $25,684 per annum.

Further particulars and Conditions of Appointment may be obtained from the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF.

Applications close with the Registrar, University of Canterbury, Private Bag, Christchurch, New Zealand, on 30 September 1982. H1

ABERYSTWYTH
THE UNIVERSITY OF WALES COLLEGE
DEPARTMENT OF EXTRA MURAL STUDIES

TUTOR IN ARCHAEOLOGY

Applications are invited for the post of TUTOR in ARCHAEOLOGY to commence on 1 October 1982 or as soon as possible thereafter. The successful candidate should possess good organising qualifications and a keen interest in local archaeology and the teaching of adults.

The appointment will be graded in the Lecturer Scale £5,070 to £10,650 per annum plus the initial cost of living allowance of £1,035 per annum. Starting salary will be determined according to the qualifications and experience of the successful candidate.

Further particulars and application forms can be obtained from The Registrar, Penglais, Aberystwyth, Dyfed SY23 1NG (tel. 0970 623111 ext 307) to whom completed applications should be returned not later than Friday 6 August 1982. H1

NEW ZEALAND
MASSEY UNIVERSITY
Palmerston North.

LECTURER IN FOOD ENGINEERING

Applications are invited for this position in the Department of Food Technology. Applicants should be suitably qualified in Engineering or Technology or a related discipline and preferably have experience or interest in the application of engineering principles to the food industry.

In this expanding department, food science, engineering, and related disciplines are integrated in the teaching courses at undergraduate levels. Undergraduate research is also a responsibility of the department.

Salary: Lecturer $14,980 – $19,830; Senior Lecturer, $19,830 (K1 = Stg 0.7668 approx.)

Initial contract period is for 3 years. Other benefits include a gratuity of 34% taxed at 5%, appointment and repatriation fares, leave fares for the staff member and family after 18 months of service, settling-in and out allowances, 12 days paid leave per year, education fares and assistance towards school fees, free housing, contributory pension and medical benefits schemes are available.

Detailed applications (five copies) with curriculum vitae together with names and addresses of three referees should be received by: The Registrar, The University of Technology, Private Mail Bag, Papua New Guinea by 14 August 1982. Applicants resident in the United Kingdom should also send one copy to the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF. H1

BIRMINGHAM
UNIVERSITY OF
FACULTY OF COMMERCE AND SOCIAL SCIENCE
DEPARTMENT OF ECONOMIC AND SOCIAL HISTORY

Temporary Lectureship in Economic History

The successful candidate will be expected to teach part of a course on British economic foreign policy and relations in the declining years of British imperialism in the nineteenth and twentieth centuries. He or she may also be required to assist with tutoring and supervising undergraduates in the Department.

Appointment will be for 1 year from 1 October 1982 within the bottom six points of the lecturer scale (£6,070 – £8,705 p.a.) plus London supplement.

Further particulars and application form from the Assistant Registrar (Commercial), University of Birmingham, Box 363, Birmingham B15 2TT to whom completed forms should be returned by 6 August 1982. Applications quoting reference 2580/RA. H1

HONG KONG
UNIVERSITY OF
STAFF TUTORSHIP IN ACCOUNTANCY

Applications are invited for the post of Staff Tutor in Accountancy in the Department of Extra-mural Studies. The appointee will be expected to teach on Method and Practice of Teaching and a knowledge of Clinical Psychology would be an advantage.

Annual salary (superannuable) scale: HK$16,860–$17,580 (approx.) Starting salary will depend on qualifications and experience.

At current rates, salaries are free of tax. There is no tax on gratuities of 15% of salary, children's education allowances, leave and medical benefits.

Further particulars and application forms may be obtained from the Assistant Registrar (Appointments), Universities Service Unit, 20 Gordon Square, London WC1H 0PF, quoting reference AS/1. Appointments Secretary, The University of Hong Kong, Hong Kong. The closing date for applications is 31 August 1982. H1

NEWCASTLE UPON TYNE
UNIVERSITY OF
DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

Applications are invited for the post of Lecturer in the Department of Electrical and Electronic Engineering for a period of 2 years starting on 1st October 1982.

The duties will be confined to suitably qualified and experienced candidates who will be required to assist with tutorial and laboratory teaching in the Department.

Salary will be at an appropriate point on the scale £5,070 – £10,650 per annum according to age, qualifications and experience.

Further particulars and application form from the Assistant Registrar (Commercial), University of Newcastle upon Tyne, NE1 7RU, with whom nominations should be submitted together with the names of two referees. Completed forms should be lodged not later than 30th August 1982. Please quote reference number 1782. H1

NEWCASTLE UPON TYNE
UNIVERSITY OF
DEPARTMENT OF SPANISH AND SPANISH-AMERICAN STUDIES

Applications are invited for the post of Lecturer in the Department of Spanish in the Faculty of Arts and Social Studies to commence on 1 October 1982 or as soon thereafter as possible. The successful candidate will be required to teach on Modern Spanish Literature and to contribute to the Department's undergraduate courses at all levels. Preference will be given to candidates with a Doctorate or equivalent research degree and/or teaching experience in the field of Modern Spanish Literature.

Salary will be at an appropriate point on the scale £5,070 – £10,650 per annum according to age, qualifications and experience.

Further particulars may be obtained from the Registrar (Academic), University of Newcastle upon Tyne, NE1 7RU, with whom nominations should be submitted together with the names of two referees. Completed forms should be lodged not later than 30th August 1982. Please quote reference 1682. H1

THE OPEN UNIVERSITY

REGIONAL DIRECTOR
(LONDON)

Applications are invited for secondment to the post of Regional Director (London), which is temporarily vacant for the period to the end of May 1986. The Regional Director is the Open University's senior responsible officer for the London area (comprising the whole Greater London area).

The person appointed will be concerned with the implementation in London of all relevant aspects of the University's educational policy, including the recruitment and supervision of part-time tutors and counsellors (with the help of a corps of full-time staff tutors, senior counsellors and administrative staff). Co-operation with institutions of higher, adult and further education, and with local education authorities, is a vital part of the job.

According to the successful applicants' qualifications and experience, the salary to be offered will be at an appropriate point on the professional-equivalent salary range (current minimum £16,730 p.a. plus London allowance of £1,035).

Applications should be made by letter, accompanied by a curriculum vitae, to the Acting Director of Studies (4390), Regional Tutorial Services, The Open University, Walton Hall, Milton Keynes MK7 6AA, from whom further particulars are available, or telephone Milton Keynes (0908) 653960: there is a 24 hour answering service on 653868.

Closing date for applications: 9th August.

NEW ZEALAND
MASSEY UNIVERSITY
Palmerston North

SENIOR LECTURER/ LECTURER IN FOOD TECHNOLOGY

Applications are invited for the position in the Department of Food Technology.

Applicants should be suitably qualified in Food Technology or a related discipline and preferably have experience or interest in the application of applied food research.

In this expanding department, food science, engineering, and related disciplines are integrated in the teaching courses at undergraduate levels. Undergraduate research is also a responsibility of the department.

Salary: Senior Lecturer NZ$24,154 – $29,136 (after review); Lecturer NZ$18,840 – $23,470 – $27,832 (starting salary will be reviewed annually – normally on 1 April – and salary scale benefits. If there is no suitable applicant in your area the University will provide an air ticket to Auckland (or Christchurch) and return. Approximate value $1,650 (K1 = $1,650 approx.)

Initial contract period is for 3 years. Other benefits include a gratuity of 34% taxed at 5% on appointment and repatriation fares for staff member and family after 18 months of service, settling-in and out allowances, 12 days paid leave per year, education fares and assistance towards school fees, free housing, contributory pension and medical benefits schemes are available.

Detailed applications (five copies) with curriculum vitae together with the names and addresses of three referees should be received by: The Registrar, The University of Technology, Private Mail Bag, Papua New Guinea by 14 August 1982. Applicants resident in the United Kingdom should also send one copy to the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF. H1

MALAWI
UNIVERSITY OF
THE POLYTECHNIC

Applications are invited from suitably qualified candidates for the post of **SENIOR LECTURER IN TECHNICAL EDUCATION** in the University of Malawi at The Polytechnic.

Salary Scales:
Senior Lecturer: K6,500 – K9,300 pa
Senior Lecturer: K5,500 – K8,000 pa (£1 sterling = K1.9565)

In exceptional circumstances the British Government may provide salary supplementation. Salary supplementation is payable by the Department for Overseas Development to certain categories of staff in order to ensure that they are not financially disadvantaged by service overseas. Details of the scheme are available from the Appointments Section, Overseas Development Administration, Eland House, Stag Place, London SW1E 5DH (tel. 01-213 3000 ext 12).

Applications should be made on the official application form obtainable from the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF (tel. 01-387 8572) quoting reference number AS/1. Completed forms should be returned to the Association of Commonwealth Universities (Appts) by 30th August 1982. H1

NEW ZEALAND
MASSEY UNIVERSITY
Palmerston North

SENIOR LECTURER/ LECTURER IN FOOD TECHNOLOGY

Applications are invited for this position in the Department of Food Technology.

Applicants should be suitably qualified in Food Technology or a related discipline and preferably have experience or interest in the application of applied food research.

In this expanding department, food science, engineering, and related disciplines are integrated in the teaching courses at undergraduate levels. Undergraduate research is also a responsibility of the department.

Salary: Senior Lecturer NZ$24,154 – $29,136 (after review); Lecturer NZ$18,840 – $23,470 – $27,832 (starting salary will be reviewed annually – normally on 1 April – and salary scale benefits. If there is no suitable applicant in your area the University will provide an air ticket to Auckland (or Christchurch) and return. Approximate value $1,650 (K1 = $1,650 approx.)

Initial contract period is for 3 years. Other benefits include a gratuity of 34% taxed at 5% on appointment and repatriation fares for staff member and family after 18 months of service, settling-in and out allowances, 12 days paid leave per year, education fares and assistance towards school fees, free housing, contributory pension and medical benefits schemes are available.

Detailed applications (five copies) with curriculum vitae together with the names and addresses of three referees should be received by: The Registrar, The University of Technology, Private Mail Bag, Papua New Guinea by 14 August 1982. Applicants resident in the United Kingdom should also send one copy to the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF. H1

Universities continued

UNIVERSITY OF ZIMBABWE

Applications are invited for the following posts:

ACADEMIC

PROFESSOR: DEPARTMENT OF ECONOMICS
(available 1 September, 1982)

Applicants should be suitably qualified and have specialised knowledge of one or more of the following disciplines: Money, Banking and Public Finance; Industrial Economics and Planning; International Trade and Finance.

LECTURESHIPS/SENIOR LECTURESHIPS: DEPARTMENT OF PHYSIOLOGY
(2 posts) (available immediately)

Applicants must hold a medical degree and/or a Ph.D. (D.Phil.) degree in human (mammalian) Physiology. Preference will be given to physiologists working in (a) cardiovascular/respiratory/exercise; (b) endocrinology; (c) neurophysiology fields. Postdoctoral training and research, as well as teaching experience are highly desirable.

ANALYTICAL CHEMIST: INSTITUTE OF MINING RESEARCH
(available immediately)

Applicants must have B.Sc. in Chemistry and M.Sc. in Analytical Chemistry degrees with experience in modern instrumental techniques applied to geological and metallurgical materials.

RESEARCH

RESEARCH FELLOWSHIP: FACULTY OF ENGINEERING
(available immediately)

Applicants should be suitably qualified graduates, preferably with doctorals. He/she will be required to undertake research in one of the following Departments: Civil Engineering, Electrical Engineering or Mechanical Engineering. Preference will be given to applicants in Mechanical Engineering. However the nature and quality of the research proposal will be a major determinant in the award of the fellowship. Appointment will be for one year in the first instance.

SALARY SCALES

Academic

Non-Medical
Analytical Chemist/Lecturer Grade II:
Z$9,018×618–9,564×552–13,428
Analytical Chemist/Lecturer Grade I: Z$13,980×396–16,564
Senior Lecturer: Z$15,000×480–18,840
Professor: Z$19,452×812–20,676×840–23,196

Medical
Assistant Lecturer: Z$11,664×432–13,392
Lecturer Grade II:
Z$14,856×432–15,120×468–15,588×480–17,508
Lecturer Grade I: Z$17,988×480–19,908
Senior Lecturer: Z$20,100×600–22,500×604–23,004

Research
Research Fellow Grade II: Z$7,716×480–9,636
Research Fellow Grade I; Z$11,160×504–13,176
Senior Research Fellow: Z$12,396×468–15,672

Appointments on the above scales according to qualifications and experience.

Conditions of Service: Both permanent terms and short-term contracts are offered. Persons who are not Zimbabwean citizens may be appointed only on a short-term contract basis with an initial contract period of two years.

Six copies of Applications giving full personal particulars (including full name, place and date of birth, etc.), qualifications, employment and experience, present salary, date of availability, telephone number, and the names and addresses of three referees should be addressed to the Director, Appointments & Personnel, University of Zimbabwe, P.O. Box MP167, Mount Pleasant, Harare, Zimbabwe, from whom further particulars are available. A further copy of application should also be sent to the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF, from whom further particulars also obtainable.

Closing date for receipt of applications is *15 August, 1982*, except for the posts in Physiology which is *31 August, 1982*.

AUSTRALIA

Applications are invited for the following posts for which applications close on the dates shown. SALARIES (unless otherwise stated) are as follows: Professor $A43,904; Senior Lecturer $A26,127–$A32,782; Lecturer $A20,065–$A27,338; Senior Tutor $A18,068–$A20,996. Further details and applications procedure may be obtained from The Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF.

James Cook University of North Queensland
LECTURER IN ELECTRICAL AND ELECTRONIC ENGINEERING
The position is available in the first instance until 31 July 1985. It is expected that the successful candidate would commence duties early in 1983. Candidates should possess a higher degree and evidence of active and successful research in an approved area and/or recent industrial experience (preferably in a research group) would be an added advantage. The Department has research interests in various branches of electrical and electronic engineering and while well qualified applicants from any appropriate branch will be considered particular preference will be given to those in the field of applications of microprocessors and computers.
The successful candidate would be expected to lecture in the undergraduate courses and carry out research in a field which is within the Department's interests.
27 August 1982.

University of Melbourne
LECTURERS (LIMITED TENURE/ CONTINUING) IN MODERN GREEK
Department of Classical Studies)
Applicants must be fluent in both Modern Greek and English and hold a university degree (preferably a higher degree) of which Modern Greek language and literature formed a major part.
Appointees will be required to teach Modern Greek language and literature from c.1600 to the present, but preference may be given in appointing to one of the lecturerships to an applicant also competent to teach Greek language and literature of earlier periods.
Appointment is a Limited Tenure lectureship will be from 1 January 1983 until December 1984 with the possibility of extension. Appointment to a Continuing lectureship will also be from 1 January 1983.
One of the appointees will be required to teach at La Trobe or Monash Universities as well as at Melbourne.
20 September 1982.

The Flinders University of South Australia
CHAIR OF COMPUTING SCIENCE
Applications are invited from scholars in any area of Computing Science for appointment to the foundation Chair of Computing Science in the newly-established discipline of Computing Science in the School of Mathematical Sciences. The Professor will be head of the discipline and will be expected to provide leadership both in research in computing science and in the teaching of computing science in the University as a whole. Teaching responsibilities of the discipline will include courses for those taking a major in computing science for their degrees and for those whose study is in other areas but who need a background in computing at varying levels.
17 September 1982.

Chair of Drama
School of Humanities
The programmes offered by the discipline of Drama bring together training in the theory and practice of drama as it relates to theatre, film, television and radio. Selected students are also prepared for professional careers in performance, management and direction. The discipline has developed strong interests in modern European drama, performance analysis and theories of the drama in all media; and the University expects that the person appointed will both strengthen the discipline's activities in these areas and further develop interests in the history of drama, Asian drama, cinema studies or other fields.
Ideally, applicants should have experience and professional standing in the theoretical, practical and research aspects of drama to enable them to move freely in both the university world and the performing arts professions; but applications will be welcomed from candidates who have major strengths in one or two of those aspects rather than in all three.
17 September 1982.

The Australian National University
Faculty of Arts
Department of Romance Languages
Applications are invited from suitably qualified persons to the following positions in the Faculty of Arts which the University hopes to fill, subject to funds being available:

LECTURER IN ITALIAN
27 August 1982.
The successful applicant will have a good honours degree and also a higher degree; previous experience would be useful. The appointee will be expected to teach literature to second and third year and also some language. The texts studied at present are drawn mainly from the 19th and 20th centuries, but consideration will also be given to applicants whose special interests lie in other areas. The successful applicant must be prepared to accept an administrative responsibility for the Italian section on a rotating basis with the person at present in charge.

SENIOR TUTOR IN ITALIAN
A good honours degree is required and, if possible, a higher degree in Italian. The appointee will be expected to take mostly language classes in all three years, but will have responsibility for at least one literature course. The texts studied at present are drawn mainly from the 19th and 20th centuries, but consideration will also be given to applicants whose special interests lie in other areas. The successful applicant must be prepared to accept an administrative responsibility for the Italian section on a rotating basis with the person at present in charge.

Salary will be up to £5675 per annum on the Research Assistant scale (under review). Senior tutorships will be advertised in the autumn of 1982 for appointments in 1983 at a maximum of £6,900 per annum. Superannuation will be under U.S.S. conditions.

Applications in the form of a curriculum vitae (3 copies) with the names of three referees should be sent by the 20th September 1982 to the Registrar, The Australian National University, P.O. Box 4, Canberra, A.C.T. 2600, Australia, from whom further particulars may be obtained. Applicants resident in the United Kingdom should also send one copy to the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF. H1

PAPUA NEW GUINEA
THE UNIVERSITY OF TECHNOLOGY
DEPARTMENT OF LANGUAGE AND SOCIAL SCIENCE

LECTURER/SENIOR LECTURER
COMMUNICATION ENGINEERING

Applications are invited for the above position in the Department of Electrical and Communications Engineering.

A vacancy exists in the field of communication engineering.

A higher degree and teaching qualifications will be preferred and industrial experience is desirable. Some experience in satellite applications would be an advantage.

Salary: Senior Lecturer K19,830 – K23,660; Associate Professor K23,660 – K27,490 (K1 = $1.28 approx.)

Initial contract period is for 3 years. Other benefits include a gratuity of 34% taxed at 5% on appointment and repatriation fares for staff member and family after 18 months of service, settling-in and out allowances, 12 days paid leave per year, education fares and assistance towards school fees, free housing, contributory pension and medical benefits schemes are available.

Detailed applications (five copies) with curriculum vitae together with the names and addresses of three referees should be received by: The Registrar, The University of Technology, Private Mail Bag, Papua New Guinea by 14 August 1982. Applicants resident in the United Kingdom should also send one copy to the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF. H1

JOHANNESBURG
UNIVERSITY OF THE WITWATERSRAND

Applications are invited from suitably qualified persons, regardless of sex, race, colour or national origin, for appointment to the following posts with effect from January 1983:

DEPARTMENT OF ENVIRONMENTAL PLANNING

LECTURER/SENIOR LECTURER

R19 857–R24 048 p.a. (£1 = R1.58 approx.)

Preference will be given to applicants who have a proven record of achievement in the field of climatology/meteorology.

JUNIOR/ASSISTANT GEOMORPHOLOGY LECTURER

R11 824–R14 317 p.a. (£1 = R1.58 approx.)

Appointment would be made for a period of three years and would be terminable after a minimum of seven years by a simple opportunity will be given for research to be undertaken. Applicants who have specialised in computer work and who may have had experience in computing lectures and practical classes, would be most welcome to apply.

Intending applicants are advised to obtain this information sheet which contains, in addition to these posts from the Personnel Officer, University of the Witwatersrand, Jan Smuts Avenue, Johannesburg, 2001, South Africa, quoting reference AC 6971. Applications should be lodged by 30 September 1982. H1

LONDON
THE OPEN UNIVERSITY
REGIONAL TUTORIAL STUDIES

TEMPORARY SENIOR COUNSELLOR IN THE LONDON REGION

A vacancy has arisen for a temporary post of Senior Counsellor in the London Region for a period of 18 months. The post will be based at the London regional headquarters which are located at Central College, 887 Finchley Road, London, NW2 2RC.

Senior Counsellors are normally graduates with recent or current experience within the broad field of adult, further or higher education. The post requires a person who is interested in the development and analysis of support services for the adult learner, particularly in the context of the multi-media system of the Open University. A concern for academic communication and the administrative processes needed to make this effective for the students are clearly of prime importance.

The appointment will be made on the Lecturer scale £6,070–£12,855 plus £1,035 London weighting allowance.

Application forms and further particulars may be obtained from: Andrew Lyster, Director of Tutorial Services, The Open University, Walton Hall, Milton Keynes, MK7 6AA, or telephone Milton Keynes (0908) 653960: there is a 24 hour answering service on 653868.

Closing date for applications: 9th August. H1

SURREY
UNIVERSITY OF
DEPARTMENT OF EDUCATIONAL STUDIES (COMPUTER ASSISTED LEARNING)

RESEARCH OFFICER

Applications are invited for the post of Research Officer in Computer Assisted Learning within the Department of Educational Studies. The appointment is for 3 years and some experience of computing and an active interest in education are essential. Experience in the use of computers in Education and/or Training would be an advantage. Work will be under the direction of Dr. T. Hinton, who takes up the post of Director of Computer Assisted Learning in September and from whom further particulars may be obtainable by telephoning Guildford 71281 extension 745.

Salary will be up to £5675 per annum on the Research Assistant scale (under review). Senior superannuation will be under U.S.S. conditions. H1

Applications in the form of a curriculum vitae (3 copies) with the names of three referees should be sent by the 20th September 1982 to the Registrar, The University of Technology, Private Mail Bag, Papua New Guinea by 14 August 1982. Applicants resident in the United Kingdom should also send one copy to the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF. H1

NEW ZEALAND
UNIVERSITY OF CANTERBURY

LECTURER IN POLITICAL SCIENCE

Applications are invited for the above position in the Department of Political Science.

The appointment will be made in the area of Comparative Politics. Preference may be given to candidates with special interests in New Zealand/Australian politics, European politics and/or social science methodology.

The salary for Lecturers is on a scale from NZ$21,666 to $25,684 per annum.

Further particulars and Conditions of Appointment may be obtained from the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF.

Applications close with the Registrar, University of Canterbury, Private Bag, Christchurch, New Zealand, on 27 September 1982. H1

MILTON KEYNES
THE OPEN UNIVERSITY
INSTITUTE OF EDUCATIONAL TECHNOLOGY
COURSE DEVELOPMENT DIVISION

TEMPORARY LECTURER
(Re-advertisement)

The Institute wishes to appoint a temporary lecturer to advise course teams producing innovatory materials in science and/or technology.

Applicants will probably have a first degree in a subject related to science or technology. A higher degree is desirable. Experience in and knowledge of instructional design, preferably in higher education, is essential. Candidates should also be conversant with, and have experience of, the educational applications of computers.

The post is available for three years from 1st December 1982 or earlier. Secondments will be welcomed.

Salary: Lecturer Scale £6,070–£12,855 plus U86 benefits.

For an application form and further particulars please telephone Glwyn Williams, Milton Keynes (0908) 653293 or write to her at I.E.T., (43/3W/21), The Open University, Walton Hall, Milton Keynes, MK7 6AA; there is a 24 hour answering service on Milton Keynes 653868.

Closing date for applications: 9th August. H1

WALES
UNIVERSITY OF
PRIFYSGOL CYMRU

ARCHIVIST

Applications are invited for the temporary post of Archivist for a period of one year (beginning 1 October 1982 or as soon as possible thereafter) with the possibility of renewal for a second year, on the scale £6,070–£6,475–£6,898. Further particulars and application from the Registrar, The University of Wales, University Registry, King Edward VII Avenue, Cathays Park, Cardiff CF1 3NS. Closing date for applications 9 August 1982. H1

READING
UNIVERSITY OF

LECTURESHIP IN COMPUTER SCIENCE

Applications are invited from candidates who can contribute scientifically to the core courses of the degree, particularly in the areas of structure and design, database systems, and data processing practice, and who can also contribute to the teaching of CAD/CAM, Artificial Intelligence, Expert Systems, Knowledge Based Systems, Computer Architecture, VLSI, Networking and Communications. The appointment will be for a fixed period of up to two years. Candidates should have special interests in the geographical area of Middle East and in remote sensing. Secondments will be made within the first three years of the Lecturer Scale £6,070 to £8,655 to £10,650. (1/Ref. AC 681).

Further particulars and application forms (6 copies) are available from the Personnel Officer, University of Reading, Whiteknights, Reading RG6 2AH. Please quote separate reference number. Closing date 20 August 1982. H1

Polytechnics

DEPARTMENT OF ACCOUNTING AND FINANCE

LECTURER GRADE II/ SENIOR LECTURER IN ACCOUNTING

(£6,855 – £12,816)

Applicants will be required to teach to an advanced level on degree and professional courses.

Further details and a form of application are available from The Assistant Director (Administration), Trent Polytechnic, Burton Street, Nottingham NG1 4BU. Completed applications to be returned by 4 August 1982.

TRENT POLYTECHNIC NOTTINGHAM

Polytechnics continued

LEEDS POLYTECHNIC

Applications are invited for the following posts:

School of International Studies

LECTURER II IN SECRETARIAL STUDIES AND OFFICE TECHNOLOGY

Applicants should be appropriately experienced and qualified persons.

SENIOR LECTURER IN SECRETARIAL STUDIES AND OFFICE TECHNOLOGY

To participate in or lead the work of the Secretarial Studies Section.
Applicants should have extensive experience of the new Office Technology and of lecturing at an appropriate level in the Secretarial Studies field.
Closing Date for these two posts is 3 September, 1982.

School of Management and Business Studies

LECTURER II IN BEHAVIOURAL STUDIES/PERSONNEL MANAGEMENT (ONE YEAR TEMPORARY POST)

To teach these subjects on a variety of courses from undergraduate to postgraduate level, a degree is essential preferably with some specialisation in Psychology.
Closing Date for Management post only is 6 August, 1982.

Salary Scales:
Senior Lecturer: £10,173–£11,964 (bar)–£12,816
Lecturer II: £6,855–£11,022

Details from: The Services Officer, Leeds Polytechnic, Calverley Street, Leeds LS1 3HE. Tel: 0532 462355. Please enclose s.a.e.

SHEFFIELD CITY POLYTECHNIC
DEPARTMENT OF APPLIED PHYSICS
RESEARCH ASSISTANT

Title: A Study of the Effect of Corrosion Inhibitors on the Surface Corrosion of Iron-based Alloys using Backscatter Mössbauer Spectroscopy.

The work will involve the development and evaluation of the technique of Corrosion Electron Mössbauer Spectroscopy (CEMS) for the study of the surface corrosion of treated/protected steels exposed to various corrosive environments. A variety of other analytical techniques will be used.

Applicants should hold, or expect to gain, a good honours degree in Physics, Chemistry, Metallurgy or a suitable subject combination. The successful candidate should have some experience in computer programming, and show aptitude for interdisciplinary research.

The appointment is for a period of three years and the candidate would be expected to seek registration for a CNAA research degree.

Salary: £4,905–£5,580 per annum.

Further details and application forms are available from the Personnel Officer (Dept. 7), Sheffield City Polytechnic, Halfords House, Fitzalan Square, Sheffield S1 2EB or by telephoning 29911, ext. 3877. The closing date for applications is 4th August, 1982.

Sheffield City Polytechnic is an Equal Opportunities Employer.

NORTH LONDON
THE POLYTECHNIC OF
DEPARTMENT OF MATHEMATICS, STATISTICS AND COMPUTING

TEMPORARY LECTURER GRADE II IN OPERATIONAL RESEARCH

Required for one year from 1st September, 1982 to 31st August, 1983 to replace a member of staff on study leave.

The Department offers degrees and an HND involving O.R., and a postgraduate Diploma in O.R. in conjunction with the Faculty of Economics and Administrative Studies. Applicants should be able to teach the standard techniques of O.R. and should have practical work experience of its use.

The post also involves some teaching of introductory computing. There are excellent mainframe and micro computing facilities.

Salary scale: £6,855–£11,022 plus £759 London Allowance.

Application form and further details obtainable from The Establishment Officer, The Polytechnic of North London, Holloway Road, London N7 8DB.

Closing date for the receipt of applications 14 days from the appearance of this advertisement. HS

SUNDERLAND
POLYTECHNIC
Faculty of Science
Department of Mathematics and Computer Studies

LECTURER II/SENIOR LECTURER IN COMPUTER STUDIES

Salary Scale: Lit. £6,855–£10,173 Bar – £11,022 per annum. St. £10,173–£11,964 Bar – £13,818 per annum

Applicants should preferably have an honours degree, or its equivalent, and business, commercial or research experience. The successful candidate will be expected to lecture up to honours degree level in his/her specialism. Interviews will be held in early September.

An application form and further particulars may be obtained from the Personnel Officer, Sunderland Polytechnic, Langham Tower, Ryhope Road, Sunderland SR2 7EE or telephone Sunderland 76251, Ext. 17. Closing date 3 August 1982. HS

CITY OF WAKEFIELD
METROPOLITAN DISTRICT COUNCIL
BRETTON HALL COLLEGE OF HIGHER EDUCATION
affiliated to the University of Leeds
PRINCIPAL: Dr. John L. Taylor

LECTURER II/SENIOR LECTURER IN ENGLISH STUDIES

Lecturer II/Senior Lecturer Scale £6,855/£11,022/£12,816

To contribute to Undergraduate courses (Honours and Ordinary), particularly concerning the study of Literature, the Language of Literature and Literary Response.

Further details and application forms to be returned by 3 August, 1982, from the Principal, Bretton Hall College, West Bretton, Wakefield, West Yorks WF4 4LG.

Colleges with Teacher Education

North Yorkshire County Council
SCARBOROUGH
NORTH RIDING COLLEGE OF EDUCATION

Applications are invited from persons with appropriate qualifications and substantial experience in Teacher Education for the following appointment which will be from 1 January, 1983:

DEPUTY PRINCIPAL

The College is concerned principally with teacher education, both initial and in-service, with a distinct emphasis on the primary age-range.
The Salary is in the range of Group 4 at £15,238 per annum.
Further particulars and application form from The Principal (Appointments), North Riding College of Education, Filey Road, Scarborough YO11 3AZ. Telephone Scarborough 62392. Closing date for the receipt of applications Monday, 16th August, 1982.

Colleges of Higher Education

WESTHILL COLLEGE
Selly Oak, Birmingham B29 6LL
Principal: Alan G. Barnford, J.P., Hon.M.A., M.Ed., F.R.S.A.

Full-time Lecturer in Special Education (Lecturer II/S.L.) Temporary Part-time Lecturer in Special Education

Applications are invited for the above appointments commencing in the Autumn Term 1982, or as soon as possible thereafter. Candidates should be graduate, qualified teachers with experience of mentally handicapped children. In addition they should have a higher degree in education or be working towards one. The successful candidates will share in the work of the Department of Mental Handicap, which includes a well-subscribed Initial B.Ed. Course and substantial in-service work.

The temporary appointment is for one year in the first instance, and will be at the Lecturer II level on the Burnham FE Salary Scale.

Further details of the post and mode of application may be obtained from the Principal.

Closing date for applications: 31st August, 1982.

Provisional date for interviews: Week commencing 27th September, 1982.

BRIGHTON POLYTECHNIC
Department of Electrical and Electronic Engineering

PRINCIPAL LECTURER IN DIGITAL ELECTRONIC SYSTEMS/ MICROPROCESSOR TECHNOLOGY

Salary
£11,931–£15,018 pa

To teach and further develop the areas of digital electronics/microprocessor systems and applications up to BSc Honours level, which have a high priority within the Department. It will also be expected that the person appointed will make a substantial contribution to research activities by initiating/further developing existing projects or by integrating with the Reader's research group, which is currently engaged on major industrial projects concerning the application of microprocessor/microcomputer systems to electricity distribution. Relevant experience in industry in relevant areas and/or research is important. A higher degree is of advantage, though not essential.
Further details and application forms from the Deputy Head of Personnel, Brighton Polytechnic, Mithras House, Lewes Road, Brighton, BN2 4AT. Tel. Brighton 693655, Ext. 2837. Closing date 29 August 1982.

OXFORD POLYTECHNIC
Department of Geology & Physical Sciences

LII/SL IN GEOLOGY
(TEMPORARY FOR ONE YEAR)

Applications are invited for the above post, tenable from 1 September, 1982. Teaching will be at honours degree and possibly postgraduate level in some of the following areas – Palaeontology, Micropalaeontology, Stratigraphy, Petroleum Geology and Oceanography. Interest in, or experience of applied aspects of these subjects will be an advantage. The successful applicant will be expected to contribute to fieldwork, teaching and to carry out research.

SENIOR LECTURER: £10,178–£12,816
LECTURER II: £6,855–£11,022

For application form and further particulars please write to the Head of Department of Geology and Physical Sciences, Oxford Polytechnic, Oxford OX3 0BP.

CHELTENHAM
THE COLLEGE OF ST PAUL AND ST MARY
DEPARTMENT OF GEOGRAPHY AND GEOLOGY

LECTURER IN HUMAN GEOGRAPHY

Applications are invited for the post of Lecturer II/Senior Lecturer in this Department of English College of Higher Education to teach and supervise courses (Honours) degree courses in some or all of the following areas: social geography, population studies. An ability to offer European examples would be an advantage.

The post will be for one year from 1 September 1982.

Further details and application forms from the Principal's Secretary, The College of St Paul and St Mary, Cheltenham, Gloucestershire GL50 4AZ, telephone 0242 532700, to whom they should be returned not later than 5 August 1982. HS

BEDFORD
COLLEGE OF HIGHER EDUCATION
School of Science and Mathematics

TEMPORARY LECTURER II IN MATHEMATICS

Required for one year from 1 September 1982 to teach Mathematics and Computer Studies mainly to B.Sc. and in-service courses to teachers. Applicants should be well qualified Mathematicians preferably with some experience of teaching.

Further details and application forms available from the College Secretary, College of Higher Education, Cauldwell Street, Bedford MK42 9AH. Tel. 0234 45181. Ext. 233.

Application forms should be returned by 31st July. HS

LEEDS
UNIVERSITY OF
SCHOOL OF EDUCATION – COMPUTER BASED LEARNING UNIT

RESEARCH/SSRC CASE AWARD

Applications are invited from graduates with considerable flair for research into decision-making skills, in association with Metropolitan Police Authority interest in computer-based training systems. Applicants primarily interested in Ph.D. should write to Dr. Peter Taylor, University of Leeds, Leeds LS2 9JT.

Research and Studentships

BRIGHTON POLYTECHNIC
Department of Mechanical and Production Engineering
HEAT TRANSFER

Research Fellow or Research Assistant

Applications are invited for the above post which is sponsored by a major British based European motor manufacturer. The three year programme involves a detailed study of the compact heat exchanger surfaces used in vehicle radiators.

The ideal candidate, with appropriate industrial or research experience, can expect to be appointed near the middle of the Research Fellow scale. Well qualified fresh graduates will be considered for appointment as Research Assistant with a possible salary supplement of up to £1,000. The initial two year contract will be extended to a third year subject to satisfactory progress. If appropriate, the successful candidate may register for a higher degree.

Salary Scales:

Research Fellow £8,868 to £9,330
Research Assistant £4,680 to £5,355

Further details and application form from the Deputy Head of Personnel, Brighton Polytechnic, Mithras House, Lewes Road, Brighton BN2 4AT. Tel. Brighton 693655, Ext. 2537. Closing date 2 August, 1982.

College of St. Mark & St. John

AMERICAN LITERATURE (PART-TIME LECTURER)

Required for academic year 1982/83 part-time Lecturer in American Literature (8 hours per week). Additional work (up to 4 hours per week) may also be available in drama or 19th/20th century British Literature.

Curriculum Vitae and letter of application, including the names and addresses of two referees, should be sent as soon as possible to:,
The Principal,
College of St. Mark and St. John, Derriford Road,
Plymouth PL6 8BH.

Research and Studentships continued

BIRMINGHAM
THE UNIVERSITY OF
Department of Psychiatry
RESEARCH FELLOW

Applications are invited from psychologists with appropriate postgraduate training and experience for the post of Research Fellow to work with Professor Gwynne Jones on a three year project, funded by DHSS, to start on October 1st, 1982. The project, a comparative study of policies and practices concerning the treatment of psychiatric patients under conditions of medium security in a sample of NHS Regions, will be based in Birmingham but will involve considerable outside travelling.

Salary will be on Research Scale 1A £6,070 – £10,575 plus superannuation according to age and experience.

Further information from Prof. Gwynne Jones (telephone 021 472 1311 ext. 4244). Applications (6 copies) with the names of two referees should be sent to Assistant Registrar, Academic Registry, Birmingham B15 2TT, by 13 August 1982. RS

ABERYSTWYTH
THE UNIVERSITY COLLEGE OF WALES
DEPARTMENT OF AGRICULTURAL AND AGRICULTURAL ECONOMICS

Applications are invited for the post of Research Assistant, tenable for a period of one year from 1st October, 1982, to collaborate in a preliminary study of the role of Cymdeithas yr Iaith Gymraeg in their adaptation to environmental change. The successful candidate will possess a first or high second class honours degree with at least second-class honours in Biochemistry or Chemistry, or in Biological Science with an appropriate background in Biochemistry or Marine Biology. Salary at appointment will be at the rate of £5,118 per annum.

Application forms and further particulars may be obtained from the Registrar (Staffing Office), The University College, Old College, Aberystwyth SY23 2AX (Tel. 0970 3177 Ext 207). Closing date for application Friday, 6 August 1982.

DUNDEE
UNIVERSITY OF
RESEARCH FELLOW MEDICAL EDUCATION

The Centre for Medical Education, Ninewells Hospital, has a vacancy for a Research Fellow whose work would be:-

1. To take a major part in the development of educational methods in medical education. These topic areas for the Centre's staff development programmes for undergraduates in the Middle and Far East.

2. To assist in the course and supervision of projects being undertaken by the Centre for participants from overseas.

3. To develop statistical techniques for the processing of data arising from projects and educational assessments.

Applicants will have a background in educational science and preferably experience in medical education would be desirable.

The post would be available from September 1982 and extend until October 1985 and would be on the Research Fellow scale (£6,070–£10,575) plus superannuation (three copies of applications and full curriculum vitae and the names of two referees should be sent by 13th August 1982 to the Personnel Office, Dundee University, Dundee DD1 4HN, quote reference 810/82/C).

HERTFORDSHIRE

A Student of Classical Chinese required for work. Graduate in Chinese or Japanese preferred. Some practical medical experience essential.
Salary £5,000 per annum.
Apply Box 5AX/810 Wood, Berry & Co., 52 Tabard Street, SE1 4JA, closing 6.8.82.

OXFORD
THE OPEN UNIVERSITY
REGIONAL TUTORIAL SERVICES – SOUTH REGION

ADMINISTRATIVE ASSISTANT TEMPORARY/PART-TIME

Applications are invited for the temporary post of Administrative Assistant in the University's South Region which has its headquarters at Foxcombe Hall, Boars Hill, Oxford.

This temporary appointment covers a period to commence as soon as possible until 31st December 1983. The successful applicant will be required to work the equivalent of 7 days per week on a flexible basis.

The Administrative Assistant will initially be assigned duties in the area of Examinations and Student Administration, in due course the appointee will be concerned with a range of other duties.

The salary will be prorata at an appropriate point on the Univ. Grade 3A scale (£6,210–£7,971 per annum).

Candidates should normally be graduates and previous administrative experience would be an advantage.

Application forms and further particulars are available from the Regional Director (1434/41), The Open University, Foxcombe Hall, Boars Hill, Oxford, OX1 5HR.

LONDON
ROYAL INSTITUTE OF ADMINISTRATION

Staff Relations in the Civil Service

Senior Research Officer and Research Assistant

Applications are invited for the above posts arising from a three year research grant to study Staff Relations in the Civil Service since 1973. The posts will be tenable for two years commencing in November 1982 if possible, and will be administered by the RIPA. Initial starting salary for the Senior Research Officer is on a scale up to £9,933 with annual increments and for the Research Assistant on a scale up to £7,890 with annual increments. Both posts are superannuable.

Applicants should have a good academic background in industrial relations or personnel management. Familiarity with public sector industrial relations is desirable, and a good knowledge of the Civil Service would be of considerable value.

Further particulars of the posts and of the research to be obtained from the Director-General, 18 Hills Place, Oxford Circus, London W1R 1AG. Tel. 01-636 5487, to whom applications (including the names of two referees) should be sent by 16 August. HTC

CAMBRIDGE
UNIVERSITY OF
DEPARTMENT OF EDUCATION

SENIOR RESEARCH ASSOCIATES
(Readvertisement)

Applications are invited for two Senior Research Associates to undertake a project funded by the DES evaluating four experimental school-based courses in RE. The successful applicant will be responsible, with the Project Directors, for the evaluation design and, with a Research Assistant, for collecting data. He/she will participate in the evaluation training programme. Applicants should have substantial teaching and research experience, preferably in RE. Appointment to be for 2 years if possible, but for a maximum of 1 year if held jointly with a second post. Salary £6,515–£15,840 p.a.

Further particulars from the Secretary of the Department of Education, 17 Trumpington Street, Cambridge CB2 1QA, to whom formal letters of application (six forms), with the curriculum vitae and names of two referees should be sent by 31st August 1982. RS10

LONDON
UNIVERSITY OF WARWICK
SCHOOL OF LAW

FORDEN TRUST RESEARCH POST

Applications are invited for one year research post to investigate the position of ethnic minorities in the policing of industrial disputes, with particular reference to the role of the police. Applicants will have a Law degree, research experience, and preferably will be graduates. The post will be based at Warwick University Law School, although the research will be carried out in the police authorities bordering Coventry. Applications and enquiries should be addressed to Professor Bob Hepple, Warwick University Law School, Coventry CV4 7AL, to whom they should be returned not later than 5 August 1982. RS

LONDON
ROYAL INSTITUTE OF ADMINISTRATION

Staff Relations in the Civil Service

Senior Research Officer and Research Assistant

Applications are invited for the above posts arising from a three year research grant to study Staff Relations in the Civil Service since 1973. The posts will be tenable for two years commencing in November 1982 if possible, and will be administered by the RIPA. Initial starting salary for the Senior Research Officer is on a scale up to £9,933 with annual increments and for the Research Assistant on a scale up to £7,890 with annual increments. Both posts are superannuable.

Applicants should have a good academic background in industrial relations or personnel management. Familiarity with public sector industrial relations is desirable, and a good knowledge of the Civil Service would be of considerable value.

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Research and Studentships continued

DEPARTMENT OF TOWN AND COUNTRY PLANNING

RESEARCH ASSISTANT/ DEMONSTRATORS

(£5,355–£5,580–£5,808–£6,039)

Good honours graduates desirous of working for a higher degree are invited to apply for three-year research appointments in respect of the following projects:

Agricultural Developments and Landscape Change (Ref. E144)

Authority–Dependency relations in the Local Economy (Ref E145)

The Provision of Public Sector Social Transport Services and the Inner City (Ref E146)

An analysis of Major Changes in Nottingham's Central Area since the Mid 1960s (Ref E147)

Further details and form of application available from the Assistant Director (Administration), Trent Polytechnic, Burton Street, Nottingham NG1 4BU. Forms to be returned as soon as possible.

TRENT POLYTECHNIC NOTTINGHAM

DIHE

RESEARCH ASSISTANTSHIPS 1982

1. **GEOGRAPHY:** Industrial Archaeology of the Portland and Purbeck Stone Quarrying Industry.
2. **ECONOMICS:** 'The Investment Behaviour of South Wessex Small (non-engineering) Firms 1983–1985'.
3. **FOOD SCIENCE:** 'Factors Affecting the Shelf Life of Chilled Ready Meals, with special reference to whole meal 'vendings'.

Available from 1st September, 1982. Projects 2 and 3 are readvertisements. Previous applicants will be reconsidered and need not reapply.

Salary Scales: £4,818 to £5,466 per annum.

Details and application form, which must be returned by 13th August, 1982, obtainable on receipt of a s.a.e. from:

The Director's Secretary (TH7),
Dorset Institute of Higher Education,
Wallisdown Road, Poole, Dorset BH12 5BB.

Industry and Commerce

Lecturers

Merseyside

c.£9,000 +bonus, benefits and relocation

Littlewoods has the largest commercial HONEYWELL installation outside the United States. Employing more than 600 DP professionals, the Group Management Services Department is responsible for the development, maintenance and operation of business and computer services to the Company as a whole, and has developed a reputation as a Leader in its commitment to training and career progression.

The Management Services Training Centre supplies in-house training courses, including foundation training for the annual graduate trainee intake, and a wide variety of technical development courses for more experienced staff. The Centre runs more than 100 courses per year for over 1000 students and receives approval from both the NCC and City & Guilds. It is therefore truly an educational institution in its own right and has a valid, innovative and developmental attitude to training.

Our Lecturers train and develop computing professionals of the present and managers of the future, and we would suggest that this is an excellent opportunity for your own career development. You should have a broad experience of business systems, operations or programming, ideally on HONEYWELL hardware, and believe you have the necessary flair and creativity to succeed in an educative role. Alternatively, you may be currently teaching computing in an educational establishment and wish to move to a commercial environment. Not only will you be involved in lecturing and the development of courses, techniques, appraisals and reports, but you may also contribute to recruitment, counselling and technical investigation.

Be instructed by our Advising Consultant and take your next move a professional one, and we shall deliver the goods. For further details contact Brian Mitchell on 061-833 0427 or 061-485 7798 (Evenings and Weekends before 9 pm).

LITTLEWOODS
SERVING THE NATION

Technical Sales & Management Appointments
ISCR
Specialist Computer Recruitment Ltd
SOUTH James House, 40 James Street London W1M 5HS 01-935 0677/4060 0481
MIDLANDS & INTERNATIONAL 26 37 Great Charles St BS Queensway Birmingham B3 3JY 021-200 2181
NORTH Stockport House, The Precinct Manchester M3 3JA 061-833 0427
BELGIUM Avenue Louise 287, Boite 4, 1050 Bruxelles 010 322-640 7151/71
HOLLAND Willemsweg 92, 1071 RX Amsterdam 010 3135-7894-72

Administration

OXFORD
THE OPEN UNIVERSITY
REGIONAL TUTORIAL SERVICES – SOUTH REGION

ADMINISTRATIVE ASSISTANT TEMPORARY/PART-TIME

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The Administrative Assistant will initially be assigned duties in the area of Examinations and Student Administration, in due course the appointee will be concerned with a range of other duties.

The salary will be prorata at an appropriate point on the Univ. Grade 3A scale (£6,210–£7,971 per annum).

Candidates should normally be graduates and previous administrative experience would be an advantage.

Application forms and further particulars are available from the Regional Director (1434/41), The Open University, Foxcombe Hall, Boars Hill, Oxford, OX1 5HR.

CARDIFF
WELSH JOINT EDUCATION COMMITTEE
CYD-BWYLLGOR ADDYSG CYMRU

DEPUTY EDUCATION SECRETARY £15,864–£16,971

This is a new post resulting from the creation of the Mid Glamorgan County Council Local Authority. Under Education. The Deputy Education Secretary's work will straddle the Advisory Service functions and the Regional Advisory Council Further Education. He/she will therefore need wide experience in the administration of the Further Education Sector.

Further details and application forms returnable by 31st December 1982 from the Secretary to the Welsh Joint Education Committee, 245 Western Avenue, Cardiff CF5 2YX (0222 561911).

NEWCASTLE UPON TYNE
UNIVERSITY OF

ADMINISTRATIVE ASSISTANT ESTABLISHMENT SECTION

REGISTRAR'S OFFICE

Applications are invited for an appointment as an Administrative Assistant in the Establishment Section of the Registrar's Office. Candidates should be graduates of a University of equivalent professional qualifications; should have some experience and traits experience and should have an interest in personnel work.

Salary will be at an appropriate point on the Grade 3A scale (£6,210–£7,971 per annum), according to qualifications and experience.

Further particulars may be obtained from the Deputy Registrar, The University, Kensington Terrace, Newcastle Upon Tyne, NE1 7RU, with whom applications (6 copies), together with the names and addresses of 3 referees, should be lodged not later than 3rd September 1982. Please quote Ref. no. 7/82.

Overseas continued

UNIVERSITY OF CAPE TOWN

Applications are invited for the following posts, for appointment on or as soon as possible after 1 January 1983.

Lecturer in Economic History

Special interests and qualifications in African (Subsistence) History and Southern African Economic History will be an advantage, but Economic Historians with qualifications in other fields will not be excluded from consideration.

Lecturer in Political Studies

The successful applicant will be expected to carry out research and to participate in teaching in one or more branches of political studies.

General:

Appointment to both of the above posts, depending on qualifications and experience, will be made on the salary scale R12 667 x 792 – 14 587 x 934 – 322 173. In addition a pensionable bonus of nearly one month's salary is payable annually. Short leaving benefits include 75% resettlement fares for dependants at UCT, generous research leave privileges, a housing subsidy which is now also available to single persons subject to some reserve regulations, pensions fund, medical aid and group life assurance.

Applications should submit a curriculum vitae stating present position and salary, research interests and publications. Five copies of testimonials should be forwarded and the names and addresses of three referees supplied.

Further information should be obtained either from Miss J Lord S.A. University's Office, Chichester House, 278 High Holborn, London WCIV 7HE or the Registrar, (attention: Appointments Office), University of Cape Town, Rondebosch 7700, South Africa, by whom applications (quoting ref. no. E/261) must be received not later than 13 August 1982. The University's policy is not to disclose in the appointment of staff on the grounds of sex, race or religion. Further information on the implementation of this policy is obtainable on request.

AUSTRALIA
Royal Melbourne Institute of Technology Limited

Senior Lecturer/Lecturer in Mining Engineering

Department of Metallurgy and Mining

The Department of Metallurgy and Mining is seeking a suitably qualified and experienced mining engineer to assist in the development of its educational programmes. The Department anticipates a substantial growth in its mining section arising from the implementation of a four year degree course and the establishment of higher level courses and applied research activities.

The position calls for a graduate with a number of years of practical experience, preferably in Australian mining activities plus proven ability in the conduct of Research and Development projects and theoretical aspects of some relevant specialisation. A second or higher qualification would be an advantage. Eligibility for corporate membership of the Institution of Engineers is essential. The ability to relate to and communicate effectively with undergraduates in the field and the classroom is a necessity. Preference will be given to applicants with experience and research interests in several of the following fields: metalliferous underground and open pit mining; open cut coal mining; materials handling; mine ventilation; brown coal mining; mine economics; computer assisted mine management methods.

The position is a tenured position.

Salary $A 28,127–$A 32,729 for Senior Lecturer
$A 20,963–$A27,539 for Lecturer

A position description is available from Staff Branch, RMIT, Box 2476V GPO Melbourne 3001, Australia. Applications quoting ref. no. 124/11/AN to the Staff Officer by 21 August, 1982.

Detailed enquiries should be addressed to the Head of Department, Dr O. Jeffrey, at the above address.

The Department also has access to funds which may be used to support a visiting lecturer for periods of three to nine months. Interested persons are invited to contact the Head of Department directly for further details.

CHURCH MISSIONARY SOCIETY

has a vacancy for a

Deputy Regional Secretary (Representation)

at its headquarters in London.

This is a new senior post which will involve deputising for the British Region Secretary in certain aspects of her work.

We require a person of faith and vision, who has the skills and ability to communicate this to people and to train others who are to be educators in mission in a variety of settings; experience of conference planning and administration, and the supervision of staff an advantage; and knowledge of the Anglican Church, its structure/worship and work of mission in the country.

Salary £7,308 – £8,400 per annum plus CMS car.

Contributory pension scheme, season ticket loan.

Further details and application form from Miss M. H. Beaver, Personnel Secretary, CMS 157 Waterloo Road, London SE1 8UU. (Tel. 01-928 8681)

Closing date for applications, Friday, 6 August, 1982.

Economics tutor needed for tutorial classes in Birmingham – full or part-time teaching at O and A level. Please telephone 021 454 8637.

Personal

IMMEDIATE ADVANCES £100 to £50,000. Written terms on request. Regional Trust Ltd., 1 Dover Street, Piccadilly, London W1. 493 0414/5. 491 8554 or 499 3410. L000

Don'sdiary

Wednesday

The holiday feeling engendered by the prospect of the next five days in the Hartz mountains of Northern Germany, and heightened by collecting rail warrant, air ticket and foreign exchange, is kept firmly in perspective by the knowledge that the time will be spent inside a hotel lecturing on industrial relations to 10 senior German personnel managers. Perhaps a change will be as good as a rest. Despite correspondence with the course organizers, Carl Duisberg Sprachendienst Niedersachsen, both John, who will look after the personnel management topics, and myself are still somewhat unsure as to its exact purpose. Is it to extend the participants' specialist vocabulary or provide an appreciation of the British system or both? What are the participants themselves expecting? Put aside these niggling doubts and concentrate on the final assembly of notes, handouts, case studies and OHPs. The support staff in the Learning Materials Workshop and others have worked hard over the past two weeks to get it all ready on time and I just hope we can do justice to their efforts.

Thursday

Having set the alarm for the unearthly hour of 05.00, I face the "joys" of 12 hours' travelling by car, train, coach and plane. Get to Heathrow with plenty of time to spare for checking-in – could have caught a later train and spent the extra time in bed. We are met at Hannover and, during the drive to Bad Lauterberg, discover that the Hartz mountains provided much of Charlemagne's gold and that the prefix "Bad" denotes the official seal of approval for a good spa. Certainly there is more industrialization than I'd expected in a mountain spa area. Arrive at the hotel at 16.30 to find it's the modern barrack variety 'nestling' across a delightful wooded valley obscuring the view for the houses around it. Just enough time to book in, freshen-up (including a cup of tea), check the teaching accommodation and meet Mike, the CDSN member of our teaching trio, before the scheduled start of the course at 18.00. The ice is soon set by cocktails (we're still waiting for the alcoholic part), dinner and afterwards informal introductions by the course members in the bar. By 23.30 I have to admit defeat and retire to bed.

Friday

While John isn't enthusiastic about cooked meats and cheese for breakfast, I'm not overjoyed at the teaching commencing at the uncivilized hour of 08.30 – thank goodness John has the first session. As expected, the time allocated for my introductory session on 'Industrial Relations and the British Perspective' is too short to cover all the planned material. Initially I find it a little distracting to have Mike listing many of my words/phrases on the flip chart or course members getting up to consult massive dictionaries – but one soon adjusts to it. The full impact of the English language element of the course really becomes apparent when Mike, after lunch, uses the sheets to paper almost the entire room – and that's just the result of one morning. By dinner time I've become so absorbed in the course that I feel as if I have been here for a week. Finish with the normal end of day adjournment to the bar.

Saturday

After a whole morning of explaining and discussing the intricacies of the law relating to employment and industrial relations, as well as trying to make up some of the lost ground from yesterday, I'm ready to seize my first opportunity for a short break from the confines of the hotel. Plan to wander around the town and look at the sights – if any; but five minutes after I leave the hotel the heavens open up, I get soaked and have to return to dry out. The evening is to be a formal business dinner with invited guests but, unfortunately, the British Consul in Hannover is unable to attend because of another engagement involving, or in honour of, a member of the British royal family – this certainly puts us in our rightful place in the pecking order. During the dinner I mention that I'd like to see the East German border, which is only 20 kilometres from the hotel, and one course member bravely offers to lend me her car.

Sunday

I arrive at breakfast to find Ursula with her car keys and log book and, after brief instructions on the car's controls, cautiously depart for a short tour of the German countryside including the fences and watchtowers of the border with the guards inspecting me through binoculars. My evening session has to be rescheduled to 22.00 to accommodate the opening of the World Cup – must get our priorities right.

Interesting to discover that in nine out of 10 unfair dismissal cases we look at the German answer would be the same as in Britain. The one exception involves swearing which, while perhaps accepted as a normal part of conversation on the British shop floor, is treated more seriously in Germany.

Monday

On the final stretch of the course. During the coffee break I find myself becoming not only an ambassador for the polytechnic and British industrial relations but also, as the Falklands crisis reaches its climax, British foreign policy. The German view ranges from those who draw comparisons with the consequences of Hitler's unopposed invasion of Czechoslovakia to those who refer to the islands as the Malvinas. In the final course review, we are pleased to hear that we have met the participants' expectations, achieved the right blend of English language/subject content and even given them some new ideas to think about. Certainly it has been an exhausting but enjoyable. Pack up all the teaching paraphernalia and then back to Hannover to enjoy our last evening relaxing over a quiet meal and taking a tram ride into the town centre. Return to the hotel just time to hear, do British Forces radio (the first time I've heard the news all week), that the Argentinians have surrendered.

Tuesday

Depart from Hannover on the 09.00 businessman's flight. Everything goes smoothly until we arrive at Reading to discover we have an hour and a half's wait for the next train to Bristol-Parkway. Eventually arrive at 12.30 only to find that the car won't start – five days in the open has taken its toll of a suspect battery. Normality appears to be returning with a vengeance. While John takes a taxi to the polytechnic, I once again have to call on the services of the AA before making a brief visit to the polytechnic to ensure that it is still standing and functioning in spite of my absence. At home the children are intrigued, as usual, by the bits and pieces of sugar, salt, tram tickets etc. that I always collect for them when I'm away (it's cheaper and more interesting than presents).

Mike Salamon

The author is Senior Lecturer in Industrial Relations in the Department of Management Studies at Bristol Polytechnic.

Phantastry of the opera house

Patrick Nuttgens

It is difficult to establish what constitutes a great city and I have spent hours in many a city discussing whether it was great, usually reaching the sad conclusion that it was not. I still do not know what is a great city but even after a few days I had no doubt that Sydney was one of them. Other cities in Australia may be more attractive, more comfortable, more artistic. None of them is great, as Sydney is.

One Saturday the Professor of Architecture at Sydney University, Peter Johnson, took us up in a helicopter to see the city as a whole and it was the most colourful and crazy sight – the huge bay, bounded and battered by peninsulas and dotted with boats. The high buildings are tightly clustered on the slopes above the main harbour, glittering and arrogant. Down below it seethes with life, especially around the port and the famous red light district nostalgically called Kings Cross. It has the congestion expected of a city centre and the widely spread-out spaciousness of suburbs, long terraces of colonial houses with decorative cast iron balconies and corrugated roofs, forests that creep in upon the city and hide expensive modern houses, stern warehouses converted restaurants – and lots of people of many races.

But giving a majesty and magic to it all are the two great buildings at its heart – the Sydney Harbour Bridge, which celebrated its golden jubilee this year and seems never to lose its awe-inspiring arrogance however many times you pass over it, and the Opera House down below, doomed you might think to insignificance beneath that towering masterpiece and yet making a gesture every bit as original as the bridge and completing one of the most dramatic and unforgettable civic scenes in the world. The Sydney Opera House, they say, is the greatest architectural adventure of our time. If you cannot stop crossing the bridge, you cannot stop coming back to the Opera House and wondering at it.

I should say at this point that the Opera House is the kind of building I deeply deplore. It offends against everything I have taught and still advocate – about reason and function and the proper use of technology and answering human needs (there isn't even a car park) and being on time and at the right cost. There have been few more bizarre episodes in architectural management, there were disastrous interruptions and the final cost is a kind of Australian joke, being met from a lottery. And yet it is a triumph. I spent many hours there, on three occasions, and would have gone again and again if I could.

It isn't even an opera house. It is a fantastic complex housing a concert hall, a smaller theatre for opera and ballet, a drama theatre, a small hall for chamber music and cinema, an exhibition area, a recording studio and various restaurants and bars. A few are beneath the famous shells; most are stuffed inside the plinth with the utmost ingenuity and totally baffling orientation. And they aren't even shells. There was no way such shapes could be put up in shell concrete; the "shells" are huge vaults of precast post-tensioned concrete sections, coming down to earth through rooms to the confusion of some and the fascination of others.

Nothing could have been more dramatic than the departure of the brilliant designer Joern Utzon who won the competition in 1956. He went ten years later in 1966, with the structure, not the cladding, of the plinth completed and the structure, not the insides, of the shells in place. According to an account by Peter Hall, the design architect among the three who gave up their other work to complete the opera house, none of the drawings eventually received from Utzon identified a material, dimensioned a room or described a building component.

The change in architects, and the redefinition of the brief, indeed the writing of the brief for the first time – "the job was being built, in effect" says Peter Hall, "without definition of what was expected of it" – led to some profound changes, the most dramatic of which is that, as far as the great "shells" are concerned, there is no connexion between the shape of the inside and the shape of the outside. In any case Stage III of the building was in effect a new building – almost an exercise in conservation – in which Hall accepted what he found as if it was an old building and completed it in his own way. The result is emotionally disputed by architects whose arguments will never be resolved. You either like the result or you don't.

The acoustics are what they set out to achieve. They wanted – and achieved – a longer reverberation time at mid frequencies than we are accustomed to, notably in the Festival Hall. It serves wonderfully for hefty and rich symphonies. The Cesar Franck which we listened to surrounded us with sweet thick sound and sent us into happy applause at the end. To my surprise the audience also gave rapturous applause to the Chopin piano concerto, which seemed to me ill served by an acoustic which blurred the sounds and robbed it of the clarity that I remember. It may of course have been the soloist; but he looked more than satisfied with what he had done, so it must have been the hall.

I end on a note of criticism and praise. The Sydney Opera House must have been designed to keep disabled people at bay. It has lifts which do not connect; you end up tracking along internal corridors from lift to lift. Maybe because of that – or maybe because of something in the Australian character – the staff go to amazing lengths to help. In a tour of the whole building with the technical manager, we found lots of ways around. Before the concert a manageress saw us, changed our seats, made sure that there would be the least number of steps to mount and checked that all as well.

In the end I looked at the steps rather than walk up and down them. And that is a rare treat, because the great flight of steps from the concourse is one of the glories of the opera house. But what is great architecture if it is not to do with great flights of steps? Where would architects be if there were no staircase to design?

Sir Geoffrey – running on empty

Keith Hampson

Once upon a time, in the good old days of demand management, governments were likened to maniac drivers. They slammed on the brakes and trod on the accelerator. They were meant to do this alternatively, but usually managed to convey the impression they were doing both at the same time.

This Government is different. If nobody knew whether governments in the good old days were coming or going, this one tells everyone it is standing still. Stop-Go economics used to be excused on the grounds that a touch on the brakes and a touch on the accelerator were essential parts of sane driving. But then Sir Geoffrey got his driving licence, and one learnt that "touches" were not enough.

If previous governments overdid the acceleration in their third and fourth years, this one is in danger of forgetting that people do not want to buy a vehicle that does not move at all. Hitting monetary targets is success in academic not human terms. After the roasting Sir Geoffrey has had over the last three years it is understandable he basks in the glow of this achievement. But if working at full capacity has in the past proved cripplingly inflationary, and dramatic expansions of demand have proved themselves delusory, the present tendency towards "long term" views of the economy bears little relationship to real politics. People want to see success in their lifetimes.

Hence the Falklands opinion polls: we were successful! But as Harold Wilson – remember him – was wont to say: a week in politics is a long time. By 1984 the Chancellor – if he survives – looks like presenting the electorate with years of sacrifice, the prospect of a rosy future, but a present little better than he inherited.

However, politicians being what they are, what I have just outlined is an unlikely scenario. The heady days of the South Atlantic, everyone knows, will not last for long. Harold Wilson, pointing to his Rhodesia days, would naturally call an election this year. But those days, and this type of opportunism, have gone, we are told. So with a year to go, though the Treasury might dream of further cuts in public spending, frankly they are simply not on.

I stress this because, surrounded as my constituency is by universities, I am aware that morale is at a pitch where almost anything is believed, including the assumption that the universities are again to be victims of the Treasury axe. Let me assure you, Sir Geoffrey has a few passengers who are increasingly keen to see his bar on the move. Major spending areas – and particularly capital programmes – are unlikely to be cut this time around.

Of course, education would stand in better stead if it could demonstrate that it is an appropriate way of mobilizing the economy, or that it could contribute to the growth of the economy and is not a drain on the public purse. Now the relationship of higher education and the economy is highly complex – some would say as much so that it cannot be identified. But at the moment there are precious few politicians – of any party – who are very convinced of the argument. And higher education has in large part itself to blame. In terms of the balance of courses or of interest in part-time courses, the record speaks for itself.

I can only applaud *The THES*'s plug for the latter. Some of us have for many years argued that part-time provision in this country was a national disgrace. But the traditionalists still look to be in control of our universities. Let them recall the old Chinese proverb: "I hear and I forget; I do and I understand", because the distribution of resources is going to be more related to the type of education offered.

If one is honest, what can one point to that would convince anyone on the Department of Education and Science that "restructuring" would have been undertaken were it not for recent financial pressures?

The collective voice of the universities has fought a rearguard action on the lowest common denominator of opinion and a preference even now for claims on resources to be judged on quantitative rather than qualitative grounds. It must be said: discrimination is, has been, and will be inevitable. But the principles on which it is to be exercised warrant greater public debate.

LETTERS TO THE EDITOR

Priorities of social science research

Sir, – Of the eight social scientists you invited to comment (*THES*, July 16) on the apparent attempt by the Social Science Research Council to reorientate research priorities more towards users' needs than the central concerns of disciplines, seven were sociologists. All of them take the view, as I do myself, that such an attempt would be misguided. But what I find remarkable is that – with the splendid exception of Peter Abell – they show so little awareness of the fact that the relationship which presently exists in this county between research and the development (?) of sociology as a discipline is highly unsatisfactory.

One reason why the relationship is unsatisfactory is identified by Abell: the preoccupation of far too many sociologists with types of "theory" – often no more than mere word-spinning – which neither derive from problems actually encountered in the conduct of empirical inquiry nor result in propositions of an empirically testable kind. A second, complementary reason should also be stressed: the rather scandalous disregard shown in British sociology over the last 10 to 15 years for maintaining standards of research expertise, and, especially in the area of data analysis. It would, for instance, be revealing to know what proportion of British sociology undergraduates, graduate students or teachers could now read their way intelligently through a typical number of, say, the *American Sociological Review* – and, still more so, the proportion of those who couldn't who would be at all disturbed by the fact. It has of course been the standard ploy to divert attention away from inadequacies in this respect by attacks on "positivism", "number-crunching", "technique for its own sake", etc. But this will no longer do. The post-1968 rhetoric is wearing thin and, more importantly, it is being demonstrated in one substantive field of sociology after another that the use of formal models and quantitative methods has a major part to play in the proper integration of theory and research. Not all sociologists will wish to operate in the style in question, nor need they; but all – and all of their students – should be capable of appreciating, and of engaging in *informed* criticism of the work of those who do. If they cannot, then – as seems already to be happening in some cases – they will simply be left shouting slogans from the sidelines.

Two practical requirements follow. First, graduate work in British sociology departments *should* be reorganized so as to contain a far larger element of research training. The distinction which Robert Moore seeks to draw between such training and "postgraduate education" seems to me invalid and to smack of (for him) a surprising intellectual conservatism. No sound research training can of course be given without basic methodological issues being also treated, but equally, no sociology graduate can be regarded as properly educated without having a grounding in the range of techniques through which sociological inquiry is now carried out.

Secondly, the SSRC and other research funding agencies need to undertake far more painstaking and detailed assessments than they now do of the merits of research proposals from the standpoint of their likely contribution to disciplinary concerns: in particular, of just what are the theoretical issues to be addressed, of just what are the techniques of data collection and analysis to be applied, and above all of just how theory and research connect. The SSRC could learn much here from the evaluation procedures followed by bodies such as the American National Science Foundation or the Volkswagen Foundation, but of course in the last analysis it is the composition of its committees that will count. Hence the importance of maintaining – and, if need be, in opposition to Margaret Stacey's claim for the equitable (= equal ?) representation of women as much as to specifically political appointments – that one criterion should precede all others: namely, recognized – or, it might be safer to say, internationally recognized – ability and achievement in research in the field in question. If this is deemed elitist or sexist, so be it.

Yours sincerely,
JOHN H. GOLDTHORPE,
Nuffield College,
Oxford.

Sir, – In your symposium about social science research you misprinted my text to give quite the contrary meaning. I wrote: "The questions posed by the academic community are not, of course, *unrelated* to the issues of the day. However, they are generally posed in terms of some larger conception of how society works or how it is changing." You printed: "The questions . . . are not, of course, related to the issues . . ."

It would be most unfortunate if the version, as printed, were falsely attributed to me and I would be grateful, therefore, if you would allow me to confirm what I actually wrote.

Yours faithfully,
RAY PAHL
Professor of Sociology, Darwin College, Kent University.

Sandwich courses

Sir, – I read with great interest the announcement in the House of Commons by Mr William Waldegrave that an additional 575 sandwich course placements are to be funded by the Manpower Services Commission. This is a very welcome development at a time when industry is finding it exceedingly difficult to fund such training places. However, I am dismayed at the further proposal to spend £50,000 to fund research into the cost benefits of sandwich-type education in relation to other forms of engineering education. In engineering the case for the integration of academic and practical training has been known and accepted for more than 50 years and this has been stated in numerous reports over the years including Finniston and CONCERT. The problem facing industry is how to finance this or any other kind of training at a time when work forces are being reduced and profitability eroded. The Government's £50,000 would, I suggest, be much better spent providing a few extra training places rather than producing yet another report to gather dust on someone's shelf.

Yours faithfully,
V. JOHN OSOLA
President,
Institution of Mechanical Engineers,
1 Birdcage Walk, London SW1.

John Mackintosh

Sir, – As someone who knew John Mackintosh well, I welcomed David Marquand's perceptive and obviously deeply felt account of a tragically brief life (*THES*, July 16). There was, however, one strange omission in his tribute: John was a passionate believer in devolution and had he lived the outcome of the 1979 referendum would, I feel, have been totally different.

One little known fact of John's varied career is that he worked for six weeks as staff tutor in social sciences for the Open University in Scotland. He was returned to Parliament in October 1974, so we lost his services, but he was always a strong supporter of the Open University.

Yours faithfully,
HENRY COWPER
Senior Counsellor,
The Open University in Scotland,
60 Melville Street, Edinburgh.

Scottish report

Sir, – Your article (*THES*, July 9) on this college's response to the Scottish Tertiary Council's report on "The Structure and Management" of further education in Scotland reflected many of the points put forward by the governing body of academic council. However, may I take the opportunity to raise several other issues which were contained in the college's response.

The college did suggest that if a new body was to be established it should be advisory to the Secretary of State for an initial period when it would perform all the functions eventually intended and establish its credibility. Then would follow a period of national review before asking Parliament to grant complete executive authority to the body.

The college would want a clear definition durig this advisory period as to the procedures and criteria to be used to make decisions so that, unlike the University Grants Committee model, the decisions of the new body are *open* and can be scrutinized by public.

The college is concerned that if the new body is established it should include the Scottish universities as well as the public sector institutions.

Finally, the college also took the view, and this may also be contentious, that members of the new body should serve as representatives and not as individuals, with the chairman elected by the members. The appointment of a paid full-time chief officer should be considered as should the powers of the chairman.

Yours sincerely,
G. A. RICHARDSON,
Principal,
The Queen's College,
Glasgow.

Sponsorship

Sir, – I have just completed a survey, based on work previously done for the Standing Conference of Employers of Graduates, to find out the number of undergraduates who were sponsored by employers when they began their degree courses in 1980, according to the subjects studied. In addition, I asked for current levels of salary paid during industrial training and the supplementary awards paid.

Participants in the survey reported about 1,700 sponsored undergraduates, mainly in engineering companies. In addition, there were over 400 who started their courses while in HM Forces, the Civil Service and in employment with other employers. I estimate that at least another 400 were sponsored by employers who did not reply.

We can compare these figures with the estimates by the Central Services Unit of the number of first-degree graduates who are likely to seek employment in 1983 (excluding those taking higher degrees, working overseas, etc). The proportion of sponsored undergraduates is highest in electrical/electronic, mechanical and production engineering, and employers will find in 1983 that at least 40 per cent of those likely to seek employment are already sponsored. Half of these have been studying on three-year full-time courses, combined with industrial training.

The report has limited distribution, being sent only to those who took part, but special reports are being prepared for other bodies which may be interested.

Yours faithfully,
P. B. DEAN,
Doyer House, Chertsey, Surrey.

Media studies

Sir, – With reference to the letter from Professor D. W. Barron (*THES*, July 16), I am somewhat surprised by the tone. Nevertheless, the facts are: 1. The University Grants Committee considered the film and media studies area worthy of support. 2. The demand was 10:1 over subscription for each place. 3. This year alone the current two lecturers have operated a 23:1 ratio and have been declining to accept a further 30 students in autumn semester and 20 students in spring semester; 4. The opportunities in the not very distant future within cable television, satellite television and increasing numbers of local radio stations will add to the possibilities for graduates in film and media studies who already have openings in marketing (an industrial need), broadcasting (radio and TV), film production, advertising, publishing, teaching, packaging, etc.

Yours faithfully,
A. FORRESTER,
Information Office,
University of Stirling.

Leverhulme seminar

Sir, – May I be permitted two observations on the six resolutions adopted by the Leverhulme seminar on "Resources and their allocation" (*THES*, July 9).

First, there is a glaring double-think which in Resolution Five celebrates centralism as the effective guiding principle under conditions of contraction and declining resources, when applied to intra-institutional resource allocation, but, in the exhortation to the National Advisory Body to adopt a periphery-to-centre approach, contained in Resolution Three, denies the centre any directional central planning and funding function in allocating resources between institutions. Is the doublethink best noted as a defence of institutional ambition and autonomy against any who might wish to frustrate it, be they at the centre or inside? And isn't there a lesson here for the NAB as it comes to decide what efficacious means it may adopt?

Secondly, Resolution Four dangerously misrepresents how quality issues might be used to determine courses' quantity, at any rate in the public sector. It may be argued that an expenditure-led contraction of local authority higher education represents a costs-based rationalization of academic courses. It is unfortunate that this has become transposed in many minds – including seminar participants' – to an academic rationalization hinting at a preservation of quality at the expense of the dross thought to exist in LAHE. It would be quite reprehensible if the philosophy and methodology adopted by the NAB compounded the latter view by seeming to rest courses' loss squarely on quality failure. Such an outcome would have the most unwelcome and unwarranted reverberations on the academic and work careers of past and remaining students, their staffs, colleges, future careers and the reputation of institutions involved, this last being the single most important factor in the recruitment of graduates by employers.

As is well known, if imperfectly understood, quality control in LAHE at the threshold level is substantively well developed through a system of external validation and progress review, whereby attention is paid to courses and institution performance in addition to student performance. Whatever may have been argued as the rationale for the University Grants Committee cuts last summer, thanks to the system of quality control in LAHE, its "rationalization" can and should be seen as a function of costs alone, and not gilded to be some better promise of quality. It would have been better had the referent of Resolution Four remained "i" (the UGC) and not become "they" (the UGC and the NAB).

May I stress that these are my personal views and should not be taken as indicative of the organization for which I work.

Yours faithfully,
RITA AUSTIN
Registrar,
CNAA Development Services.

Translation wanted

Sir, – Would Professor Goldman kindly provide an English translation of his letter "CNAA and course control" (*THES*, June 11) for we readers on the colonial fringes of academe, whose appreciation of accepted standards of academic writing may be lagging somewhat.

Or should we colonials merely utter a cry of despair, à la Goldman: "Would he had resourced his letter, and had been seen to resource rather than under-resource it!"

Yours faithfully,
J. C. BALDRY,
Department of Economics,
University of New England,
Australia.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend them if necessary.

Union View

Taking down the academic barriers

From their inception polytechnics sought to establish their academic credibility as national institutions. The mere existence of the binary divide meant that those seeking so-called academic excellence took as their models the universities. Some polytechnics even adopted their nomenclature, with alien titles such as professor, pro-rector and dean.

The university model for higher education barely sufficed during the last decade; members of the National Association of Teachers in Further and Higher Education are aware it will not carry us through to the 1990s. Apart from anything else the Brixton and Toxteth riots must force us to rethink the role of public sector institutions.

These are provided by the community at great expense, are often situated in the most deprived inner city areas but do little for those who live and work, or seek to obtain work, around them.

Where should we look to for a more enlightened alternative? Perhaps to the United States. An example of involvement with the community is science parks.

Attempts to ape the American experience in Britain have had varying success. At South Bank Polytechnic we are building a technopark, 70,000 square feet of purpose-built accommodation linked physically with the polytechnic. The intention is to provide a nursery environment for small, high technology, new businesses. Taking advantage of the professional and technical expertise of the staff and physical resources of

the polytechnic we hope to attract up to 100 entrepreneurs and their employees into the industrial wasteland of the Elephant and Castle area of London.

In effect the polytechnic will regenerate and revitalize the community around it. By creating employment and involving ourselves in the community we expect to gain support from the business and industrial communities and local authorities and hope to survive the impending cuts. Several universities are adopting a superficially similar strategy, seeking alternative funds to compensate for the savage cuts recently imposed by government policy and adoroitly passed on by the University Grants Committee. Sited in pleasant, green surroundings and owning sections of the countryside, some universities have made tentative but arms-length links with industrialists and property developers and are attempting to create what they call science parks.

Unfortunately little thought has been given to the relationship and involvement of the academic staff in the development of these science parks, besides which vice chancellors and industrialists make strange bedfellows. The result could well be half built and empty light industrial developments, with university registrars frantically seeking prospective tenants, while attempting to compete with the professional and hard-headed local employment officers of Liverpool, Wigan and South Wales.

I do not wish to decry these attempts, as neither the public sector nor the universities can continue along the old tried paths. In one way or another, through innovation centres, community resource centres, business advice centres and so on we must break down the barriers between us and the outside world. To do this will require imagination, guts and enterprise. I wonder if those running our academic institutions have those attributes or if they are still chasing the ghost of academic excellence.

Roger Jinkinson

The author is on the national executive of the National Association of Teachers in Further and Higher Education, and director of the Southbank Technopark Co.